DOCUMENT RESUME

ED 179 460 SO 012 163

TITLE	A Learning Guide for Social Studies Skill Development 7-12.
INSTITUTION	Wisconsin State Dept. of Public Instruction, Madison. Div. of Instructional Services.; Wisconsin State Dept. of Public Instruction, Madison. Social Studies Curriculum Study Committee.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C.
PUB DATE	79
NOTE	186p.
EDRS PRICE	MF01/PC08 Plus Postage.
DESCRIPTORS	Basic Skills; Citizen Participation; Communication Skills; Content Reading; Critical Thinking; Interpretive Reading; Learning Activities; Map Skills; Problem Solving; *Process Education; Reading Skills; Secondary Education; *Skill Development; *Skills; *Social Studies; Statistical Analysis

ABSTRACT

Eight social studies skills and strategies for their implementation at the secondary level are outlined. Each skill is presented in a separate chapter which defines the skill, offers a rationale for its inclusion, and provides sample activities. Chapter I focuses on listening and speaking skills. Activities emphasize using a recording to develop skill in listening for main ideas and using oral reports to develop speaking skills. Chapter II, Reading Skills, outlines study techniques based on surveying, questioning, reading, reciting, and reviewing. Activities in Chapter III, Writing Skills, include describing candidates for public office, writing precis and summaries, and developing theses. Chapter IV, Observation Skills, involves interpreting editorial cartoons, charts, and graphs. Chapter V discusses space and time orientation. Students identify states from cards containing fragments of maps and draw a map of the world from the perspective of different countries. Chapter VI focuses on quantitative skills. Students generate and display data on television viewing habits and number of jobs available through newspaper advertisements. Chapter VII presents activities for problem solving. Students develop hypotheses from newspaper stories, complete a research assignment, and examine case studies. Chapter VIII features democratic participation skills. Activities include rating political candidates and writing a position paper. Sample case studies, methods for stimulating reflection, and methods for building a skill network are included. (KC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED179460

A LEARNING GUIDE FOR SOCIAL STUDIES SKILL DEVELOPMENT 7-12

STATE SOCIAL STUDIES CURRICULUM STUDY COMMITTEE

Wisconsin Department of Public Instruction

Barbara Thompson, Ph.D., State Superintendent

Catherine Stehly, Ed.D., Assistant Superintendent
Division for Instructional Services

Arnold Chandler, Ph.D., Director
Bureau for Program Development

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Wisconsin Dissemination Project
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

This project was supported in part by funds appropriated under Title IV of the Elementary and Secondary Education Act of 1965, as Amended by P.L. 93-380, the U.S. Office of Education. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred.

SP 012 163

Bulletin NO. 8545

Table of Contents

Foreword 1

Introduction 1

Unit One: Listening and Speaking Skills 6

Unit Two: Reading Skills 19

Unit Three: Writing Skills 44

Unit Four: Observation Skills (Locating and Gathering Information) 59

Unit Five: Time and Space Orientation - Map and Globe Skills 83

Unit Six: Quantitative Skills 93

Unit Seven: Problem Solving Skills 102

Unit Eight: Democratic Participation Skills 130

Summary 139

Appendix I Case Studies 145

Appendix II Techniques for Stimulating Reflection -- Problem Solving 151

Appendix III Building a Skill Network for the Social Studies Curriculum 158

FOREWORD

This learning guide provides a vertical link with the State Committee's previous skill guide, "Skill Development in the K-6 Social Studies Program." It presents a network of skills and strategies for their implementation that should help social studies educators in Wisconsin's secondary schools assess current programs and student competencies with regard to basic civic abilities. The learning skills delineated here are fundamental to social studies education and should provide students with those tools necessary to make better sense out of their social environments, as well as allow them to be better decision-makers.

Eight general skill areas are identified. They are: listening and speaking, reading, writing, observation, time and spatial relationship (map and globe), quantitative, problem solving, and democratic participation skills.

In the discussion of each skill area, the reader will find a definition of the skill, a rationale for its inclusion, and sample activities appropriate to specific skill areas.

The State Committee presents this guide in the hope of improving social studies skill development among Wisconsin students. While much has been done in this area, we recognize the need to work harder in this critical educational domain.

Finally, it is appropriate to thank Bill Dunwiddie and his committee for their excellent work. I would also like to extend a special note of appreciation to Vicky Everson for technical assistance in helping me edit and assemble this guide.

As always, reader reactions are welcome. Educators who want further information and/or inservice opportunities in skill work should contact me.

H. Michael Hartoonian
State Coordinator of Social Studies Education
Wisconsin Department of Public Instruction
126 Langdon Street
Madison, Wisconsin 53702

SUB-COMMITTEE ON 7-12 SKILL DEVELOPMENT

William Dunwiddie
Armstrong High School
Neenah Public Schools

Barbara Herzog
Woodworth Junior High School
Fond du Lac Public Schools

Patricia Koll
University of Wisconsin
Oshkosh

Earl Lemon
Nicolet High School
Glendale-Nicolet Public Schools

Clarence Newton
Shawano High School
Shawano Public Schools

Rozanne Schmidtlein
Marquette University
Milwaukee

INTRODUCTION

> "So he had grown rich at last, and thought to transmit to his only son all the cut-and-dried experience which he himself had purchased at the price of his lost illusions; a noble last illusion of age." -- Balzac

If we were to prepare for a journey to a strange land, we would try to pack clothes, equipment and other cultural items of the most universal usefulness. Great care would be taken to pack only those essentials that would seem to be most useful, no matter what circumstances might be encountered.

Today's young people are also preparing for a journey to a strange land... the future, and require similar preparation from the school's curriculum. The most effective way to prepare students for an uncertain future is to provide them with essential skills that have broad usefulness and applicability. A skills emphasis in the social studies curriculum is, potentially, a knapsack of essentials for a life of competence.

An emphasis on skills development in the social studies does not minimize the importance of two other traditional thrusts in curricular organization: the acquisition of knowledge and the nurture of attitudes and values. Rather, it suggests that the three are most meaningful and mutually supportive when they are joined together and interrelated in the social studies curriculum. For too long content-oriented social studies programs have overemphasized knowledge acquisition at the expense of skills development and affective learning. Knowledge ought properly to be the vehicle for the attainment of that learning which holds greater potential for ensuring future competence, namely skills development. In essence, this means learning how to learn, which is the most basic skill for living with an uncertain future.

Definition and Nature of Skills

All skills are acquired through practice. And if the practice is of high quality so will be the developing skills. Social studies skills are not merely learned responses to certain stimuli. They call for conscious mental effort. Social studies skills are much more complex than such physical-motor skills as typing, throwing a ball, or shooting free throws. Social studies skills are intellectual in nature and require thinking.

A good way to define learning skills is to list their characteristics. Norris Sanders in his book Classroom Questions describes skills in this way:

1. A skill is a physical and intellectual process.
2. A skill requires knowledge, but knowledge alone does not ensure proficiency.
3. A skill can be used in a variety of situations.
4. A skill can be improved through practice.
5. A skill is often made up of a number of subskills that can be identified and practiced separately.

Most teachers use the term skills broadly to include mental as well as manual operations that are learned gradually through repeated experiences. However, practice of a skill in and of itself does not ensure improvement -- it merely provides the opportunity for the improvement of perforamnce. If a skill is practiced incorrectly, learning efforts may be hindered until the incorrect patterns are unlearned. It should be clear that practice does not necessarily make perfect. For practice of a skill to be effective and competence achieved, certain conditions are helpful. The desire to learn seems to be one important ingredient for skill improvement. It helps if the learner knows the results of performing a skill, whether he or she is doing well or poorly. Progress in learning skills is made easier where knowledge of success or failure is readily

available to the learner. Skills, especially complex learning skills, are not acquired casually. Unfortunately they are not learned, or poorly learned, simply because students saw little to be gained by learning them.

The Need for a Skills Program

To teach subject matter as an end in itself is of doubtful value. Retention studies reveal that most facts and generalizations learned in school are soon forgotten. The typical student within a few weeks forgets as much as 75-80 percent of the factual material supposedly learned in the ordinary content-oriented class. Even if students remembered for a longer period of time, effort could not keep up with the introduction of new knowledge. Knowledge is multiplying with such dramatic speed that even specialsits can barely keep up with new information in their own fields. The tentative nature of knowledge is a reality that social studies teachers must recognize.

Since it is impossible to teach everything that ought to be known, we must emphasize the need for learning how to learn, knowing how to apply knowledge, and for acquiring permanently useful learning skills. The purpose of education, as Balzac suggested, is not to teach predigested knowledge but to teach pupils to think in the presence of new situations.

Both the complexity of our society and the rapidity of change mean that students, to be equipped for an uncertain future, must be prepared for lifelong learning. Students must master the skills needed to select important informa- from the constantly flowing stream of knowledge. They must learn how to assess and assimilate new information, how to revise and reevaluate what they have already learned. Priority should be given to skills that have lasting value, that can help to make the learner increasingly responsible for his own continuing education.

One example of a basic skill that must be learned to permit and facilitate lifelong learning is reading. Much concern is being expressed today about the

reading comprehension capabilities of students. And, the demands of our changing culture make it more important than ever that all persons have adequate reading skills (both word attack and comprehension) to participate effectively in our complex society. Most workers encounter the need to relearn their job skills more than once in a career. The need to know how to continue to learn does not diminish on the job, but rather takes on new and practical importance. We should perceive reading, therefore, as a skill that can be used throughout life both for its practical value and for the pleasure it can provide in one's leisure.

The increased pressure for accountability in public education suggests a further reason why a greater emphasis on skills is desirable in the social studies curriculum. Skill performance can be observed and measured. How proficient a student may be at a specific skill can be determined by how well others (of similar age, training, experience) can perform the same task. Although it is unreasonable to hold teachers accountable for outcomes beyond their control, there is clearly more control of what happens in the development and improvement of skills than in the more indefinite objectives such as "developing good citizenship" and "promoting moral behavior."

In Wisconsin schools educational goals emphasizing basic skills have been clearly mandated by the State Superintendent's Advisory Task Force on Educational Goals. The Final Report of the Task Force stated the importance of learning skills clearly.

> "Schools are a significant agency of society for the development of basic skills. It is essential that a person be able to interact within a changing society and make reasonable judgments about it. To that end, schools must explore and implement the best possible ways for students to acquire and apply the fundamental skills necessary to learning. The student shall:
>
> 1. comprehend ideas and facts through reading, viewing and listening.
> 2. communicate ideas and facts through writing and speaking.
> 3. use the processes of language, sciences and mathematics.

4. perform psychomotor (mental-physical) activities necessary to learning.
5. use problem-solving techniques and processes used in decision-making."

The need for and justification of an increased emphasis on learning skills the social studies is unmistakable.

UNIT ONE

LISTENING AND SPEAKING SKILLS

Listening Skills

Definition

Although listening has traditionally been the most widely used language function, learning how to listen is not well understood. To learn to listen, we must realize that listening is more than merely hearing. Many hear -- few listen. Listening involves bringing thought and reaction to what is heard. In listening, we associate a meaning with familiar sound combinations and in this way acquire sources for reacting, interpreting, and knowing. Listening is affected by the voice qualities, gestures, facial expression, and mannerisms of the speaker. In addition, it is affected by our knowledge, interest, alertness, desire, and maturity as well as by other physical and environmental factors.

While listening is, like reading, a communications skill, it is unlike reading in that we cannot pause, recheck, or go back over material immediately. We must learn from the speaker whatever we can as he or she proceeds. This requires paying attention, concentrating on the speaker's message. However, concentration is made difficult by the peculiar fact that we think and can receive verbal communications much faster than we talk.

Listening skills include grasping the main ideas, gathering data, making comparisons, following the sequence of ideas, recognizing supportive details, recognizing relationships, drawing inferences, identifying emotionally laden terms, and drawing conclusions. In short, critical thinking skills are part of listening skills.

Students need to learn that listening is an active process that calls for hearing, comprehending, reacting, and retaining what has been heard. Physiological equipment for hearing as well as readiness for listening are necessary. Hearing, comprehending, and thinking must be interrelated. The attentive listener is an active participant in the speaking-listening process.

The Need for Listening Skills

In general we do not know how to listen. Most of us have simply never learned the necessary skills. We wrongly assume that listening ability is closely related to hearing acuity, that if a person can hear well he or she should be a good listener, and we believe that poor listening results from poor hearing.

Little attention is given to listening skills in our schools. Most schools focus attention upon reading, considering it the primary medium by which students learn, and the art of listening is practically forgotten. About six years are ordinarily devoted to formal reading instruction in most school systems. Little emphasis is placed on speaking, and almost no attention is given to the skills of listening.

It is surprising to realize how much we rely on listening to gain information. Ralph Nichols in his book Are You Listening? reports that of the time we spend in verbal communication, about 10 percent is given to writing, 15 percent to reading, 30 percent to talking, and 45 percent to listening. Although we use three times as much time listening as reading, little attention is given to training people how to listen.

An informal survey in almost any school would confirm the fact that students spend more time listening than in any other single activity. On the average, students spend at least half their time in school listening -- to the teacher, to other students, to films, filmstrips, videotapes, guest speakers, and the like. In secondary social studies classes, the percentage is even higher.

Incredible as it may seem, one study reported that about 80 percent of the social studies teachers in grades seven to ten lecture about 80 percent of the time. Most adults spend half of their time listening, including activities such as television where verbal communication is accompanied by a visual component.

It is difficult to realize how much we rely upon the way people listen. Our jury system depends entirely upon the listening ability of the jurors. We expect the members of a jury to listen to evidence, and then to arrive at a just verdict. A large part of the reports we read in our newspaper depend upon the listening skills of reporters who get much of their information from interviews with news sources, from speeches and press conferences. If a reporter is to be fair and accurate, he has to be skilled in listening. In countless situations in business and industry, effective communications rely on the assumption that the worker is a good listener. The world's most important affairs are conducted around conference tables where skilled listening is essential if conflicts are to be resolved, strikes settled, or negotiations are to have any chance to succeed. It is hard to overstate the need for people who have learned to be good listeners. Listening skills are obviously of such vital importance that they should receive a high priority in any well-planned social studies program.

It should be remembered that no single device or technique will serve to build good listening habits. But any method we can use that will motivate a student to listen attentively and to try to understand another's point of view is a step in the right direction. It is particularly useful in the discussion of deeply felt, controversial issues when students get rather excited and emotional. It might be called for lack of a better name, restatement. Each person can speak on an issue only after he or she has first restated the ideas and feelings of the previous speaker accurately and to that speaker's satisfaction. The device slows a discussion down considerably, but it forces careful listening by discussion participants. It also helps bring about better understanding of opposing points of view.

Hints for Teaching Listening Skills

1. Check the amount of speaking you do during a typical class period. Do you talk too much? Require too much listening?
2. Have students record the amount of time spent in listening both in class and out of class.
3. Give oral directions or announcements only once. Have other students repeat instructions if necessary.
4. Give listening tests; occasionally oral quizzes.
5. Be a good model yourself in listening.
6. Help your students learn what to listen for. With practice they can learn to listen for main ideas without assistance of lists of questions or written scripts.
7. Have students outline and compare impressions of the major points of a speech or program the class has heard.
8. Have students look for speakers' different frames of reference.
9. Occasionally have your students rate their own listening skills.
10. Be sure that you as well as your students speak clearly enough to be easily heard.
11. Most important, have something for your students that is worthy of their best listening efforts. Part of this job is to try to arrange learning activities that both interest and inform students.
12. Allow the student (initially) to communicate in a language he already knows. This is especially important for the culturally different. Utilize what happens in his outside environment to generate his willingness to listen in class.
13. As your students' listening skills increase with more adult contacts, bring more adult volunteers into the classroom.

(Adapted from Chapin, June and Gross, Richard E., TEACHING SOCIAL STUDIES SKILLS, Boston: Little, Brown and Co. 1973, page 58.)

SAMPLE LESSON: Use of a recording to develop skill in listening for main ideas.

OBJECTIVE: The student should be able to identify main ideas and support details from listening to a recorded speech.

1. Ask: "How can you figure out the main ideas when you are listening to a speech or lecture?" Invite student responses.
2. Point out that speakers often provide clues to what is important in what they are saying. Use a prepared transparency to present "Hints to Identify Main Ideas."
3. Hints to Identify Main Ideas

   a. How much time does the speaker give to a point? Generally more time is spent on the more important ideas.

   b. How often does the speaker come back to or repeat the same point? By repetition the speaker is telling you how important it is.

   c. Tone of voice. The speaker may grow more dramatic, more excited, more serious, more concerned when dealing with an idea he or she doesn't want you to miss.

   d. The rate of speaking and pace of delivery. The speaker may slow down to emphasize an idea, indicating its importance.

   e. Pay attention to facial expression and gestures. The speaker is likely to become more forceful when trying to hammer home a point.

   f. Watch for the clear-cut breaking point between main ideas. They are usually marked by transitional words or phrased such as, "My second point..." "Now, let us turn to..." "Another matter for consideration..."

   g. Jot down each major point as you hear it, leaving room between ideas to fill in details later.

h. Don't listen only for facts, nor attempt to memorize them. Concentrate on listening for main ideas. Facts are only useful for building and supporting major ideas. If you try to grasp key ideas it will help you to remember the supporting facts better than if you were to go after the facts alone.

4. Play a tape or record of a short speech, and when the tape is finished call on various students to share their impressions of the ideas they have gained from the speech. Ask: "What have you learned from this?" A recording of a news broadcast might be used for a similar lesson. The program "News and Views" heard regularly on the Wisconsin State Radio Network can also provide excellent material for learning to listen for main ideas. Recorded editorials can easily be checked against the published version to verify accuracy in listening.

5. The pamphlet Tuning In: Learning to Listen by Theodore H. Wright, Xerox Corporation, Middletown, Connecticut, 1975 will be useful in helping students develop listening skills.

SPEAKING SKILLS

Definition

Speaking is a complex process that requires coordination of both physical and mental skills. Speaking begins with random or unconscious verbal activity as the child tries to imitate sounds. It is a learned pattern of behavior and the principal means by which an individual conveys thoughts and feelings to others. Evaluation of what the student says is one of the main sources available to the teacher to judge the adequacy and accuracy of learning. Competency in speaking skills is essential to the successful student in the social studies and to the effective citizen of a democracy.

There are at least six speaking subskills that have been identified. First, the speaker should be able to demonstrate control over the tonal qualities of the voice. Included in this are pitch (inflection), loudness (volume), rate (speed of delivery), and voice quality (resonance or a clear sound). The second subskill is articulation or pronunication of words according to the generally accepted standards for sounds and accents. Logical organization is the third speaking subskill. The speaker's message should be logically arranged in a coherent manner. You tell what you are going to say, say it, then summarize what you said. Such organization is the result of clear thinking. Clarity of expression, the fourth subskill, means that the speaker's message is clear and meaningful to the listener. The fifth subskill, effective use of bodily expression, means that the speaker supports what he or she says with purposeful physical activity that aids in conveying and interpreting ideas to the listener. The sixth subskill is that of group participation. To be an effective group participant, the student must be aware of the various roles in a discussion. This skill requires the listener to be aware of what is said, how it was said, and who said it, in order to respond in an appropriate manner.

The Need for Speaking Skills

Throughout life, all of us need to communicate. This life-long process of communication is partly fulfilled by speaking. Improving and refining skills in speaking and listening are responsibilities of the school. We are asked to speak and verbally respond in countless situations both in school and out. We should learn how to speak effectively. Proficiency in speaking and listening are both essential skills for citizens of a free society. The social studies offer abundant and ready-made opportunities to help students become better speakers and listeners. By the very nature of the content and learning activities appropriate to the social studies program, the development and improvement of speaking and listening skills should be a natural consequence.

In the typical social studies classroom, the student should have frequent opportunities for oral communication. To help students develop speaking and listening skills, oral reports, panel discussions, debates, role-playing interviews, and informal discussions are a few of the appropriate activities. One of the important responsibilities of the social studies is to develop citizens who can speak effectively in public affairs, who can present and defend a point of view in political discussions, who can participate in decision-making, and who can present effectively reasoned viewpoints in a free society.

SAMPLE LESSON: Using oral reports to help students develop speaking skills.

OBJECTIVE: The student should be able to prepare and present a well-organized five minute oral report on a topic appropriate to the course.

Oral reports are a useful technique to help your students develop skill in speaking. The ability to stand up and talk to people is useful in many situations. Not all of us want to make speeches, but often we do wish to add an idea to a discussion. When we do, we want to feel at ease and present our ideas clearly and even persuasively, if possible. Here are a few pointers for the student to bear in mind in preparing and presenting oral reports.

1. A good report is based on thoughtful research. You must know your topic thoroughly before you can tell about it intelligently. Consider how much time there will be to prepare the report; then plan to use all those sources of information that you can use profitably.

2. A good report is informative and interesting. In making a report you have a two-fold task. 1) You must obtain the necessary information and interpret its meaning. 2) You must present your information in a way that is clearly understandable and interesting to your listeners. Gather more information than you will possibly need -- then select only your best and most important information for presentation. Skillful selection is important -- don't tell us everything you know.

3. A good report should be given in your own words. Use words that are familiar to you and your listeners. If new words must be used, put them on the chalkboard, pronounce them correctly, explain their meaning. Be certain you understand what you are talking about. If you don't comprehend your topic, your listeners are not likely to either, and the report will be boring.

4. A good report is easy to follow. Prepare a clear and logical outline for your report. Be sure it is well-organized and includes the major points you plan to present. Tell us what you are going to say (introduction), say it (body of your report), and tell us what you said (conclusion). Always keep your outline clearly before your listeners so they are never in doubt as to what you are trying to accomplish. Make it easy for your listeners to take notes on your report. Use visual aids to reinforce your ideas if possible.

5. A good report stimulates discussion and provokes questions. Present your report with some enthusiasm if you expect to generate some interest from your listeners. If your report involves presenting principles, generalizations, and conclusions, be sure to season your talk with a liberal sprinkling of illustrations and examples to make clear what you mean. Be prepared for questions.

6. A good report comes through loud and clear. Speak in a normal voice and so that all may hear. Look at your audience and tell (don't read) your story. Know your report so thoroughly you could tell it without reference to notes. Use notes but tell the story. Stand erect, don't fidget. Limit your presentation to the allotted time.

(Note: For further information on how to use this technique, see HOW TO USE ORAL REPORTS by Myrtle S. Larkin, National Council for the Social Studies, 3615 Wisconsin Avenue, N.W., Washington, D.C. 20036.)

SPEAKER EVALUATION FORM Date_____

Name of Speaker_____

Topic:_____

Please consider each of the following criteria. Rate each on the basis of 4 = excellent, 3 = good, 2 = fair, 1 = poor. Remember: "Ratings rate the rater."

PREPARATION: Consider: How well prepared is the speaker? Is there evidence of thorough preparation? Has the speaker consulted a variety of sources of information? Does the talk include only the best and most useful information? Is the talk well-organized? Is the outline clear? ☐

KNOWLEDGE AND UNDERSTANDING: Consider: Does the speaker seem to know his subject thoroughly? Does the speaker seem to know what he is talking about? Is the speaker able to answer questions satisfactorily?

PRESENTATION AND SPEAKING SKILL: Consider: Does the speaker speak directly to the group? Does the speaker tell what he has found or read it? Does the use of notes interfere with audience contact? Does the speaker speak clearly, pronounce words correctly, use good grammar, good diction? Is posture good? Does the speaker give the impression of sincerity? ☐

INTERESTING AND INFORMATIVE: Consider: Was the talk presented in a way that held your interest? Did the speaker present examples to illustrate clearly any generalizations? Did the talk imform listeners of new facts or ideas not readily available? Was the group attentive and interested as shown by questions at the end of the talk? ☐

EASE IN NOTE TAKING: Consider: Did the talk seem to follow a clear outline? Were new terms carefully introduced, clearly defined? Were ideas presented at a pace that made note-taking easy? Were visual aids used? Were they effective? ☐

Total Score ☐

Comments, Suggestions:

Ratings By:_____

SAMPLE LESSON: Using a panel discussion to develop speaking skills.

OBJECTIVE: Given a suitable topic, the student should be able to participate in a panel discussion, presenting both facts and opinions appropriate to the question being discussed.

In a panel discussion several students with specific knowledge informally discuss an assigned topic before a class. The purpose of a panel discussion is to present and analyze different informed views on some specific topic. It should both inform and elicit thoughtful reactions from listeners. The panel is led by a discussion leader, and is informal and conversational. There are no prepared speeches by members of the panel or the leader.

Here is a check list of suggestions to help your panel discussions function effectively:

1. Select three or four students to serve as a panel along with a discussion leader. Inform them of the responsibilities they are to assume. Provide sufficient time for study and preparation beforehand. Suggest appropriate materials and sources to consult.
2. Meet with panel members in advance. They need to reach a common understanding of the topic, how it will be presented, the general outline they will follow, and how responsibilities will be shared.
3. Discover major points to be discussed. In planning the discussion, the panel members (with your guidance) should frame an over-all pattern, a few principal questions to be considered. Discourage lengthy advance discussion. Agree on an outline, but let the discussion be free, spontaneous, unrehearsed.
4. Brief the panel moderator. Help the discussion leader to know and accept his responsibilities: introductions, continuity, summary inviting group participation, being aware of time.

5. Panel members should read widely and be well-prepared on the subject to be discussed. Each panelist should contribute to the discussion by reacting to the questions asked by the moderator. Panelists should react to each other in appropriate ways, and each should make sure that all panel members have an opportunity to react to questions.
6. Insist on thorough preparation. Emphasize the two-fold job of panel members: 1) to be knowledgeable and informed on the specific topic for discussion, and 2) to present their information to the group clearly and effectively.
7. Guard against three possible evils of discussion. (a) The pooling of ignorance, (b) the mere rearrangement of prejudices, and (c) the over-dependence on the exchange of uninformed opinions.

UNIT TWO

READING SKILLS

Definition

Reading is a process of decoding written symbols into meaningful ideas related to the reader's experience. Reading involves transforming written symbols into oral responses that act as stimuli for a thoughtful reaction by the reader. The intent and background of the reader and the nature of the reading materials influence the type or level of thought involved. Further, the effort required to read and understand the impact of the materials is, in part, controlled by the interest in the specific selection and by the attitude toward reading generally.

There are at least seven subskills of the reading process that are commonly found in social studies reading. These include locating and gathering information, organizing and evaluating information, reading rate, reading critically, comprehension, study skills, and vocabulary development.

The subskill of locating and gathering information refers to finding information within a single source as well as to synthesizing information from several sources. This subskill includes the ability to demonstrate familiarity with the various parts of a book.

Organizing and evaluating information includes retaining significant information through taking notes, outlining, and summarizing. In this subskill, the student may be exposed to chronology of events in time and space, trends, time lines, or parallel world happenings. The student may be asked to reorganize details in order to relate main ideas in generalizations.

It is important that social studies students learn to match their reading rates, or reading speeds, to their purposes as well as to the kind of material.

Fast reading (skimming and scanning) may be used to quickly find a particular piece of information or to obtain the gist of something. Casual reading refers to reading for pleasure or enrichment. Reading assigned material at the student's instructional (content) level requires that the individual can read the material. An intensive reading rate is required for reading that involves analysis and synthesis.

Critical reading requires evaluating content and reasoning. This includes recognizing and evaluating bias, propaganda, errors, inaccuracies, omissions, validity, authenticity, the source, facts or opinions, implied and stated meaning, assumptions, and important facts.

Comprehension refers to the complex process of getting meaning from written or spoken language. Few of us realize that the meaning we associate with a word is not part of the word. Words are arbitrary symbols that practically always contain not even a shred of the meanings they stand for. Meanings are always attached by association with the words. It is always hard to think of meanings as dissociated from words. We consider the two as synonymous, whereas actually words are only symbols that act as stimuli or cues to tap the vast storehouse of meanings we carry around in our minds. It is hard to realize that words mean little to students (or anyone) unless they have the experience to back them up. Words do not bring meaning to us; we bring meaning to words.

Traditionally study skills have been closely related to reading skills. Effective reading performance in the social studies today requires the application of a wide range of investigative and reference skills to a variety of printed media. Study skills generally include dictionary skills, library skills, and textbook utilization.

Vocabulary development has long been recognized as a basic reading skill in the social studies. It involves building general vocabulary as well as specialized social studies vocabulary. This specialized vocabulary includes common words that

take on a special meaning from context, names of places or personages, terms assigned to abstract concepts in the social sciences, and figurative expressions (terms that may demand an understanding of the connotation of words.)

The Need For Reading Skills

As social studies courses have been traditionally taught in Wisconsin schools (highly verbal in both content and approach), the most important skill for success in social studies has been reading. To learn about our heritage, we must read about it, comprehend what is read, and experience it in other ways.

Since the early 1960's, there have been significant curriculum reforms in the social studies that have emphasized conceptual learning and placed greater emphasis on inquiry. However, no matter what the approach to social studies learning, there has been heavy reliance on reading skills. Despite the abundance of audiovisual materials in the social studies, reading competence is still the key to successful achievement in most social studies courses. Social studies teachers would be among the first to admit that difficulties in reading materials assigned is a major reason students fail in social studies courses. Certainly some learning may take place without reading, but the inability (or unwillingness) to read does, indeed, limit the scope of learning.

With reading ability so vital to success in the social studies, it is reasonable to suggest that every social studies teacher (at every grade level) should become involved with developmental reading instruction. Although many of us may lack some of the technical know-how to help our students be better readers, this does not mean we should continue to ignore those with reading disabilities, or leave reading instruction only to reading specialists.

Much can be done to help students overcome deficiencies in reading skills. Reading specialists can provide the special knowledge we will need to help students learn to read better. However, no one is better suited than we are to

assume responsibility for developmental reading in social studies. No one is more familiar with what must be learned, with available resources, with social studies concepts and vocabulary to be learned. We may well be the most appropriate (even best qualified) to help our students become better readers.

What is needed if we are to help our students improve their reading skills? First, we must know the reading level of each of our students. Disturbing as this may be, only with this information can we sensibly choose materials for each to read with profit and enjoyment. Second, an abundance of resources at various reading levels must be available to provide materials to match the wide range of reading abilities in any normal group of students. Third, we must learn some of the special methods and techniques needed to guide student efforts toward skill improvement in reading. Fourth, we must somehow kindle in the learner a desire to be a better reader. "Kindling of interest," wrote George Palmer, "is the great function of the teacher. People sometimes say, 'I should like to teach if only pupils cared to learn.' But then, there would be little need of teaching." Much as we hate to admit it or would like to pretend otherwise, a desire to learn is necessary if there is to be improvement in reading, or writing, or any other skill.

SAMPLE LESSON: Using a textbook to develop skill in locating and gathering information.

OBJECTIVE: Given an unfamiliar textbook, the student should be able to respond correctly to at least 80 percent of the questions on a worksheet designed to measure his ability to apply knowledge about the parts of a book.

1. Ask students to name the various parts of a textbook. List these items on the chalkboard.
2. Ask students to define each part in their own words. Definitions might be placed opposite each term.
3. Distribute the books that are to be used for the lesson and the following worksheet that is to be used for this activity.
4. Make sure students understand the specific directions for completing the assignment.

Getting To Know Your Textbook

Your success in social studies will depend, in part, on how well you can use books assigned in this course. The purpose of this assignment is to help you to become familiar with one of the books we will be using. Read all of the items carefully. Answer each question using only this book.

1. The purpose of the title page of the book is_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

2. Name the authors of this book:_ _

3. When was this book copyrighted? _ _ _ _ _ _ _ _ _ _ _ _ _ (year)

4. What is the purpose of the table of contents?_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

5. The textbook is divided into _ _ _ _ major parts and _ _ _ _ _ chapters.

   The Title of Part IV is_ _

6. Chapter 11 is titled:_ It begins on page_ _ _.

7. What is the purpose of the section headed Charts, Graphs, and Diagrams?_ _ _ _ _

   _

8. What is the purpose of the Maps section? _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

   The section titled Maps is to be found on page _ _ _ _.

9. A political relief map of the United States is to be found on page _ _ _ _ _ _ _.

10. The Glossary begins on page_ _ _. It helps the reader by_ _ _ _ _ _ _ _ _

    _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

11. Show the correct pronunciation for two different terms from the Glossary.

    a) _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ b)_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

12. Give the correct definition for two different terms from the Glossary.

    a) _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ b)_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

13. What is the purpose of the Index? _

    The Index is to be found beginning on page _ _ _ _

14. What do numbers in the Index mean? _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

15. Identify the page on which information may be found for at least five (5) different items in the Index. Item _ _ _ _ _ _ _ _ _ _ page_ _ _ _ _; Item_ _ _ _ _ _ _ _ page_ _ _ _ _; Item_ _ _ _ _ _ _ _ _ _ page_ _ _ _ _; Item_ _ _ _ _ _ _ _ _ _ _ page_ _ _ _ _; Item_ _ _ _ _ _ _ _ _ _ page_ _ _ _ _

SAMPLE LESSON: Using the SQ3R technique to improve reading skill.

OBJECTIVE: Given a reading assignment, the student should be able to demonstrate familiarity with the SQ3R method for studying textual material.

Students in the social studies need to learn techniques for reading content material. Early training in reading skills is usually done with narrative material, and not much is usually done to aid the transfer of skills to the reading of textual material. Reading expository material is somewhat different from reading narrative, and the material is often more difficult. The sentence length, heavy vocabulary load, and rapid presentation of concepts require that students develop strategies for reading content material. One technique for studying textual material is Robinson's SQ3R. This technique includes five basic steps: Survey, Question, Read, Recite, and Review. Here are some suggestions for how to train students in its use.

1. Survey the reading assignment by looking at and discussing the headings (bold-faced print), pictures, graphs, or charts. The survey emphasizes the main ideas and orients the students to the materials. You may obtain immediate feedback by asking your students, "What do you know about this topic?"

2. Ask your students to change the headings to questions as they read. For example, if the heading of a section is "Myths About Crime and Delinquency," the question might be "What are some of the myths about crime and delinquency?" This questioning step provides students with reasons for reading the section and aids them in seeing important points being made.

3. Students should then read the assignment and mentally answer the questions.

4. After each section the student looks away from the book and mentally recites the answers to each of the self-imposed questions. If the student cannot answer each question, the section should be reread.

5. When students have finished reading the assignment, direct them to look back at the headings and recite the major points. Similar daily and weekly review will help students retain information.

In summary, the survey portion of the SQ3R method provides the readiness activities necessary for students to understand the material. Questioning helps to make the reader task-oriented and an active searcher for answers. With practice, students should learn to automatically rephrase headings and provide themselves with task-oriented, answer-seeking readings.

Adapted from Improving Reading Skills in Social Studies, Joseph E. Mahony, How to Do It Notebook Series 2, National Council for the Social Studies, Washington, DC, 1977, p. 5.)

SAMPLE LESSON: Directed Reading-Thinking Activity

Materials: The Afro-American in United States History - DeSilva et al, Globe Book Co.
Managing Your Money - Scholastic Magazine, Inc.

Be Informed Series - New Readers Press

Renting a House
Meeting House Costs
Getting Help With Your Housing

Audience: 8th Grade

Lesson: Money, Housing and Poverty

Purpose

The purpose of this lesson is to show the relationship of money and housing to poverty. It is necessary to recall some background experiences, real and vicarious. Underlying causes and possible solutions to these social problems will be probed and discussed. Other facets of learning, such as specific aspects of consumer education, will be integrated with this area of social studies.

Procedure

The purpose of the lesson will be accomplished by using visual aids such as maps, pictures, globes, transparencies, tape recordings, films and film strips. The class will be involved in large and small group discussions as well as making worthwhile projects.

Step 1 Readiness

A. Have many visual illustrations of poor families, housing, food and clothing. Include recent articles on poverty, housing and money as used in present day society. This information should be collected by both the students and teacher and shared with the class.

B. Small group discussions should concern the different aspects of the collected information. To encourage more interaction in the groups, a tape recorder could be used to tape the discussion.

C. Discussion in the small groups could be focused on the following questions:

1. How do you think the kind of occupation you have influences the kind of house you live in?

2. State your position on this idea: "Slums are systematically created by society."

3. State ways poor people can be instructed to take care of their homes.

D. Concepts to be discussed are underlined in the sentences. What connotations are derived from such expressions as listed below?

1. deep poverty
2. "pockets of poverty"
3. giant housing projects
4. "open-housing"
5. "rent gouging"
6. displaced families

Step 2 Readiness Again

A. In small groups have students formulate some questions that have evolved from their discussions of our topic.

B. These questions may be shared later with the entire group. Ask questions before students begin reading. This gives them a specific purpose and helps focus their attention while reading.

Step 3 Silent Reading

A. The students are to read silently from their textbook, pages 407-411.

B. Since many issues have evolved from the previous discussions, these questions should be asked while they read so they can focus on the basic problems.

Directions to students: Answer these questions after you have silently read the material.

1. What are some of the problems of poverty?

2. Why is housing a special problem?

3. How are poor people being assisted in obtaining better homes?

C. Then discuss these questions in class.

D. Read the pamphlets from the Be Informed Series with the following questions in mind.

1. Why is it difficult for people on welfare to obtain a home?

2. What is the function of FHA in helping poor people obtain a home?

3. How does your income determine the kind of house you can buy?

4. How can budgeting its money help a family improve its life style?

Step 4 Class Discussion and Evaluation

A. Some of the students involved in the discussion of this lesson may live in communities described in the text. Ask for volunteers to

obtain information about the problems in their communities and develop a project they can share with the class. Offer any guidance and assistance in obtaining materials for visual aids, paper, and paint. It is hoped that students will become more involved in these poverty problems and become active participants in helping to solve these problems.

B. Since money is a vital asset to the students' very existence, they may want to discuss this aspect of the poverty program. This could be a panel discussion.

C. Other students may be interested in developing ways their peer group could help in preserving or improving their community so it won't become a slum.

D. Each of the above projects would be shared with the entire group.

E. A comprehension check could be given to see if the purposes of the lessons were accomplished.

1. Recalling previous information studied, using real and vicarious experiences, test the generalizations below.

   a. Even though a man has a job, he cannot make enough money to meet the needs of his family.

   b. Some cities want to place poor people from the slums in new neighborhoods.

   c. Poor people who have moved to the cities from rural communities do not have the necessary skills to get good jobs.

2. Answer these questions in one or two sentences.
   a. Why is family life often difficult for poor people?

   b. Why do some housing projects become slums?

F. Further problems that may evolve from this discussion are:

1. What are some of the plans being developed to help poor people?

2. What part does education play in the lives of poor people to help them solve their many problems?

G. First-hand information about poverty programs could be obtained from a representative invited to speak to the group and from local state and federal agencies. Some students could write for information from the Department of Housing and Urban Development, Office of Economic Opportunity, Washington, DC.

SAMPLE LESSON: Vocabulary Analysis

In his classic essay, Politics and the English Language, George Orwell stated: "If thought corrupts language, language can also corrupt thought." We need only to recall the 1973 summer telecasts of the Senate Watergate hearings to realize the linguistic abuses heaped on the English language.

The American public heard such collector's items as "zero-defect system" for perfection; "containment" for the withholding of information; "plumbers" for burglars, and "laundered money" for illegal political contributions.

This use of the English language stymies comprehension on any level. Educators are no less guilty. They speak in somber tones about input and feedback, hardware and software, and cognitive skills and affective discussions. All of which is to remind us what Humpty Dumpty said to Alice: "When I use a word...it means just what I choose it to mean."

Social studies teachers should be aware of the uses of the language as illustrated in the above examples as well as in figurative expressions. The latter appear in all social studies textbooks. Examples include kitchen cabinet, summer soldier and sunshine patriot, New Deal, the spoils system, the underground railroad, and the Cold War. These terms have at least two levels of meaning: literal and symbolic (interpretative). Teachers can provide exercises to encourage reluctant readers to grasp both levels of meaning. One way to motivate students and to implement lessons with this goal is to use cartoons (political and comic), advertisements (television, newspapers, magazines), and pictures in textbooks and articles.

The teacher has to decide which words require careful attention based on the learning objective. Time does not permit indiscriminate use for vocabulary analysis alone. Below is an example of how vocabulary analysis can be used within the context of textbook material. The term Cold War is being studied:

"The United States found itself in a strange position. It was not at war with the Soviet Union. On the other hand, American-Russian relations could not be described as peaceful. Walter Lippman, a famous newspaper columnist, found a term to describe this peculiar situation. He said the United States and the Soviet Union were engaged in a "Cold War." (p. 596 Land of the Free by Caughey, Franklin & May)

1. Why is the term "Cold War" in quotation marks?
2. If a country is not at war with another country, does it mean that there is peace and good feeling between the countries?
3. What would be a "hot war?"
4. What would countries do to protect themselves if they were in a "Cold War?"
5. What kinds of messages would they send one another if one country invaded a nearby nation?

The use of terms from the lexicon of the Watergate affairs may require other classroom methods. One way is to let students write their own newspaper or magazine about the political scandal. Students could use the terms in their stories or they could find appropriate substitutes. Writing provides an experience in reducing the misunderstanding of words.

SAMPLE LESSON: Drawing Conclusions

Drawing justified conclusions from a reading selection is a skill teachers seek to help students develop. In social studies classes, the question and answer session may touch upon this skill. Unless the teacher has focused on this skill, students do not test their conclusions. The teacher will probably respond to students' conclusions with approval, disapproval, or more comments. Thus, the teacher resolves the situation by answering the question himself.

One way to introduce this skill is by using the following pattern. The reading selection is Martin Luther King's speech "I have a Dream," spoken during the march on Washington in 1963. (See page 34)

Mark Yes for each of the following conclusions that can be supported by King's speech. Which conclusions can you justify based on your own experiences? Mark No for each statement which is a weak conclusion or cannot be justified by the speech.

____1. If the racial situation continues in the United States, there will be fighting and bloodshed.

Explanation: _____

_____

____2. Every white American must share the blame for racial injustices in this nation.

Explanation: _____

_____

____3. It is right for Black Americans to use violence to achieve the goal that all men are created equal.

Explanation: _____

_____

____4. The belief in the dignity of all men can lead to a new era in racial relations in the United States.

Explanation: _____

_____

_____5. "Free at last! free at last" implies that the United States has reached a new era in racial relations.

Explanation: _____

_____

SAMPLE LESSON: Levels of Comprehension

Students need teacher direction to reach beyond the level of literal comprehension. The sample lesson below takes students at the interpretive level and proceeds to the literal level. Usually teachers reverse the process.

Using King's speech "I Have A Dream," one can quickly note that much social studies reading material contains more than one rhetorical pattern. For example, the second paragraph illustrates both contrast and time with the use of transitional words but and later. The fifth and sixth paragraphs point out the use of contrast with the use of instead of and but. These words help the reader to build up to the conclusion and the increasing tempo of King's thoughts found in the final paragraph.

Teacher awareness of these patterns and transition words can provide for more specific questioning for finding the main idea, drawing conclusions, or applying the main idea to another situation.

This speech is reprinted by permission from Rhetoric of Racial Revolt, ed. Roy L. Hill (Denver: Golden Bell Press, 1964), pp. 371-375.

1 Five score years ago, a great American, in whose symbolic shadow we stand today, signed the Emancipation Proclamation. This momentous decree came as a great beacon of light of hope to millions of Negro slaves who had been seared in the flames of withering injustice. It came as a joyous daybreak to end the long night of their captivity.

2 But one hundred years later, the Negro still is not free. One hundred years later, the life of the Negro is still sadly crippled by the manacles of segregation and the chains of discrimination.

3 One hundred years later, the Negro lives on a lonely island of poverty in the midst of a vast ocean of material prosperity. One hundred years later, the Negro is still languished in the corners of American society and finds him-

self an exile in his own land. So we have come here today to dramatize a shameful condition.

4 In a sense we have come to our nation's capital to cash a check. When the architects of our republic wrote the magnificent words of the Constitution and the Declaration of Independence, they were signing a promissory note to which every American was to fall heir. This note was a promise that all men, yes, black men as well as white men, would be guaranteed the unalienable rights of life, liberty and the pursuit of happiness.

5 It is obvious today that America has defaulted on this promissory note insofar as her citizens of color are concerned. Instead of honoring this sacred obligation, America has given the Negro people a bad check, which has come back marked "insufficient funds."

6 But we refuse to believe that the bank of justice is bankrupt. We refuse to believe that there are insufficient funds in the great vaults of opportunity of this nation. So we have come to cash this check--a check that will give us upon demand the riches of freedom and the security of justice.

7 We have also come to this hallowed spot to remind America of the fierce urgency of now. This is no time to engage in the luxury of cooling off or to take the tranquilizing drug of gradualism. Now is the time to make real the promises of democracy. Now is the time to rise from the dark and desolate valley of segregation to the sunlit path of racial justice. Now is the time to lift our nation from the quicksands of racial injustice to the solid rock of brotherhood. Now is the time to make justice a reality for all of God's children.

8 It would be fatal for the nation to overlook the urgency of the movement and to underestimate the determination of the Negro. This sweltering summer of the Negro's legitimate discontent will not pass until there is an invigorating autumn of freedom and equality. 1963 is not an end but a beginning.

Those who hope that the Negro needed to blow off steam and will now be content will have a rude awakening if the nation returns to business as usual.

9 There will be neither rest nor tranquility in America until the Negro is granted his citizenship rights. The whirlwinds of revolt will continue to shake the foundations of our nation until the bright day of justice emerges.

10 But there is something that I must say to my people who stand on the warm threshold which leads into the palace of justice. In the process of gaining our rightful place we must not be guilty of wrongful deeds.

11 Let us not seek to satisfy our thirst for freedom by drinking from the cup of bitterness and hatred. We must forever conduct our struggle on the high plane of dignity and discipline. We must not allow our creative protest to degenerate into physical violence. Again and again we must rise to the majestic heights of meeting physical force with soul force.

12 The marvelous new militancy which has engulfed the Negro community must not lead us to a distrust of all white people, for many of our white brothers, as evidenced by their presence here today, have come to realize that their destiny is tied up with our destiny and they have come to realize that their freedom is inextricably bound to our freedom. This offense we share mounted to storm the battlements of injustice must be carried forth by a bi-racial army. We cannot walk alone.

13 And as we walk, we must make the pledge that we shall always march ahead. We cannot turn back. There are those who are asking the devotees of civil rights, "When will you be satisfied?" We can never be satisfied as long as the Negro is the victim of the unspeakable horrors of police brutality.

14 We can never be satisfied as long as our bodies, heavy with the fatigue of travel, cannot gain lodging in the motels of travel, cannot gain lodging in the motels of the highways and the hotels of the cities. We cannot be satisfied as long as the Negro's basic mobility is from a smaller ghetto to a larger one.

15 We can never be satisfied as long as our children are stripped of their selfhood and robbed of their dignity by signs stating "for whites only." We cannot be satisfied as long as a Negro in Mississippi cannot vote and a Negro in New York believes he has nothing for which to vote. No, we are not satisfied, and we will not be satisfied until justice rolls down like waters and righteousness like a mighty stream.

16 I am not unmindful that some of you have come here out of excessive trials and tribulation. Some of you have come fresh from narrow jail cells. Some of you have come from areas where your quest for freedom left you battered by the storms of persecution and staggered by the winds of police brutality. You have been the veterans of creative suffering. Continue to work with the faith that unearned suffering is redemptive.

17 Go back to Mississippi; go back to Alabama; go back to South Carolina; go back to Georgia; go back to Louisiana; go back to the slums and ghettos of the Northern cities, knowing that somehow this situation can, and will be changed. Let us not wallow in the valley of despair.

18 So I say to you, my friends, that even though we must face the difficulties of today and tommorow, I still have a dream. It is a dream deeply rooted in the American dream that one day this nation will rise up and live out the true meaning of its creed--we hold these truths to be self evident, that all men are created equal.

19 I have a dream that one day on the red hills of Georgia, sons of former slaves and sons of former slave-owners will be able to sit down together at the table of brotherhood.

20 I have a dream that one day, even the state of Mississippi, a state sweltering with the heat of injustice, sweltering with the heat of oppression, will be transformed into an oasis of freedom and justice.

21 I have a dream my four little children will one day live in a nation where they will not be judged by the color of their skin but by content of their character. I have a dream today!

22 I have a dream that one day, down in Alabama, with its vicious racists, with its governor having his lips dripping with the words of interposition and nullification, that one day, right there in Alabama, little black boys and black girls will be able to join hands with little white boys and white girls as sisters and brothers. I have a dream today!

23 I have a dream that one day every valley shall be exalted, every hill and mountain shall be made low, the rough places shall be made plain, and the crooked places shall be made straight and the glory of the Lord will be revealed and all flesh shall see it together.

24 This is our hope. This is the faith that I go back to the South with.

25 With this faith we will be able to hew out of the mountain of despair a stone of hope. With this faith we will be able to transform the jangling discords of our nation into a beautiful symphony of brotherhood.

26 With this faith we will be able to work together, to pray together, to struggle together, to go to jail together, to stand up for freedom together, knowing that we will be free one day. This will be the day when all of God's children will be able to sing with new meaning--"my country 'tis of thee, sweet land of liberty, of thee I sing; land where my fathers died, land of the pilgrim's pride; from every mountain side, let freedom ring"--and if America is to be a great nation, this must become true.

27 And so let freedom ring from the prodigious hilltops of New Hampshire.

28 Let freedom ring from the mighty mountains of New York.

29 Let freedom ring from the heightening Alleghenies of Pennsylvania.

30 Let freedom ring from the snow-capped Rockies of Colorado.

31 Let freedom ring from the curvaceous slopes of California.

32 But not only that.

33 Let freedom ring from Stone Mountain of Georgia.

34 Let freedom ring from Lookout Mountain of Tennessee.

35 Let freedom ring from every hill and molehill of Mississippi, from every mountainside, let freedom ring.

36 And when this happens, and when we allow freedom to ring, when we let it ring from every village and hamlet, from every state and city, we will be able to speed up that day when all of God's children--black men and white men, Jews and Gentiles, Catholics and Protestants--will be able to join hands and to sing in the words of the old Negro spiritual, "Free at last, free at last; thank God Almighty, we are free at last."

MAKING TRANSITIONAL WORDS WORK FOR YOU

Transitional Words/Phrases	Intention or Relationship
for example, in other words, that is	Amplification
according, because, consequently, for this reason, hence, since, then, thus, therefore	Cause and effect
granted that, of course	Concession
but, conversely, despite, however, nevertheless, on the contrary, on the other hand, still, though, yet	Contrast or change
above all, indeed, more important, to repeat	Emphasis
at the same time, likewise, similarly	Equal value
also, besides, furthermore, in addition, moreover, too	Increasing quantity
finally, first, lastly, next, second, then	Order
for these reasons, in brief, in conclusion, to sum up	Summary
afterwards, before, formerly, later, meanwhile, now, presently, previously, subsequently, ultimately	Time

SAMPLE LESSON: Conflict Among Nations

An important feature of social studies instruction is providing opportunities for students to express opinions about their perceptions. The following sample lesson can increase motivation to read, to discuss, and to write. The teacher can introduce the lesson by explaining its purpose, the clarification of opinions, and describing the purpose of a linear continuum shown below.

1. Opinionnaire. Each student is to put the number in the blank which describes his opinion about the statement.

Strongly Agree	A	N	D	Strongly Disagree
1	2	3	4	5

1. _____ War may break out when a nation's pride has been wounde.
2. _____ Alliances are formed among nations only when it is to their advantage.
3. _____ Diplomatic negotiations by a nation are an attempt to get its own way by talking rather than by fighting.
4. _____ A nation should not have entangling alliances with another country.
5. _____ Weak nations are not to be respected, but treated as pawns.
6. _____ Communication among nations is the best way to reduce the chances of war.
7. _____ Nations should establish organizations to mediate any quarreling or fighting.
8. _____ A nation should always fight for what it believes in.
9. _____ Government leaders, not the people, start wars.
10. _____ The fewer contacts nations have, the less likely it is that they will have wars.

Give all students time to complete the opinionnaires. You may want to divide the class into small groups (4-5) to discuss selected statements in the opinionnaire and to give supporting or negating evidence for statements. Then suggest that the following selection contains ideas about the causes of war.

2. In this sample exercise, quotations of Woodrow Wilson, Henry Cabot Lodge, and from the Covenant of the League of Nations examine one idea about the causes of war.

"Wars between nations come from contacts. A nation with which we have no contact is a nation with which we should never fight... In this scheme for a league now before us, we create a number of new contacts, a number of new relations, which nations have not undertaken before to create..."

"Not even the wisest and most optimistic of reformers can change the geography of the globe. They say communication has quickened enormously. The Atlantic Ocean is not what it was as a barrier, or the Pacific either, I suppose. But do not forget that even under Modern Conditions the silver streak, the little channel only twenty miles wide, was England's bulwark and defense in the last war. Do not underrate the three thousand miles of Atlantic. It was on that the Monroe Doctrine, the corollary of Washington's policy, rested." - Henry Cabot Lodge.

"You know, you have been told that Washington advised us against entangling alliances and gentlemen have used that as an argument against the League of Nations. What Washington had in mind was exactly what these gentlemen want to lead us back to. The day we have left behind was a day of alliances. It was a day of balances of power. It was a day of "every nation take care of itself, or make a partnership with some other nation...

Those were the days of alliances. This project of League of Nations is a great process of disentanglement." - Woodrow Wilson

"The members of the League undertake to respect and preserve, as against outside aggression, the territorial integrity and existing political Independence of all Members of the League. In case of any such aggression, or in case of any threat or danger be fulfilled." (The Council consisted of Britain, France, Italy and Japan. The United States was supposed to become a member.) - Article 10 of the Covenant of the League of Nations.

The debate between Lodge and Wilson centered on the meaning of Article 10. You may decide to include some features of the directed reading thinking model explained elsewhere in this article to systematically improve reading comprehension levels.

References

Baker, William D., Reading Skills. Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1953.

This book contains 1,000 word passages on reading skills and is useful for both timed readings and information on improving reading habits.

Bond, Guy L. and Miles A. Tinker. Reading Difficulties, Their Diagnosis and Correction. New York: Appleton-Century Crofts, 1957, pp. 349-350.

Herber, Harold, Teaching Reading in Content Areas. Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1970

This book contains variations of the directed reading method in all secondary content areas. The book contains some excellent approaches to improve reading by using traditional textbook content.

Herr, Selma, Effective Reading for Adults. Dubuque, Iowa: William C. Brown Company, Publishers, 1966.

This book contains valuable information on critical reading skills, vocabulary development and skimming material.

Lefevre, Carl, Linguistics and the Teaching of Reading, New York: McGraw Hill Co., 1964

Niles, Olive S., Reading Skills for Young Adults. Glenview, Illinois: Scott, Foresman and Company, 1971.

Social studies teachers can improve their instruction by using Niles' ideas. Areas of critical reading include figurative language (social studies makes use of signs, symbols, personification, similes, and metaphors), inferences, relationships and judgments.

Schwartz, Melvin and John R. O'Connor, Exploring a Changing World, New York: Globe Book Co., Inc. 1966.

Shepherd, David, Effective Reading in Social Studies. Evanston, Illinois: Row Peterson and Co., 1969, pp. 16-24.

Smith, Frank. Comprehension and Learning: A Conceptual Framework for Teachers. New York: Holt, Rinehart & Winston, 1975.

Smith, Henry P. and Emerald V. Dechant, Psychology in Teaching Reading, Englewood Cliffs, New Jersey: Prentice Hall, Inc., pp. 217-218.

UNIT THREE

WRITING SKILLS

Definition

Writing is communicating through the use of language (symbols). Since writing depends solely on written symbols to communicate meaning, it needs to be exact and precise. It has its own structures and conventions for spelling and punctuation that are very different from those in spoken language.

Whatever the purpose of the writing, there are at least four writing subskills that are ordinarily involved in social studies writing assignments. 1) Writing a complete sentence means that the student expresses a complete thought in written form. 2) A second subskill is that of clarity of expression. This requires that whatever is written is clear and meaningful to the reader. 3) The third subskill, writing a paragraph, means that the writer must be able to put together a group of sentences in developing one topic. The sentences within the paragraph support or explain the main idea. Somewhere within the paragraph is a topic sentence that states the main idea of the paragraph. 4) The fourth subskill, writing an essay, means that the student must be able to connect several paragraphs all related to the same subject. The student must be able to make transitions between paragraphs, write topic sentences, and write with clarity.

In social studies classes the most common written assignments include: taking notes, outlining, writing essays, preparing book reports, writing term papers or research reports, and preparing written analyses of case studies. These activities all provide opportunities for the development of writing skills.

The Need for Writing Skills

Writing is one of the principal means by which we can convey our thoughts and feelings to others. It is one of the major ways a student may demonstrate

the adequacy and accuracy of his/her learning. It is probably true that no idea is understood clearly until it can be expressed either orally or in writing. Competency in speaking and writing skills is important to achieve success in the social studies and to be an effective citizen in a free society.

If clear expression is a result as well as a reflection of clear thinking, opportunities to learn and practice communication skills should be an essential part of the social studies program. The responsibility to help students develop communication skills rests with the classroom teacher. If Johnny can't speak or write well, we must all assume a share of the blame. Those of us in social studies share a part of the responsibility to help students express themselves clearly.

Although there is an obvious need and abundant opportunities for written expression, social studies teachers tend to ignore the development of writing skills. A survey of recent articles and methods books on the teaching of the social studies reveals little or no reference to writing skills. Few teachers' guides include structured writing exercises that identify and attempt to develop specific writing skills. Clearly it is not the aim of the social studies to develop professional writers, but competence in communicating in clear, direct writing certainly is a proper concern of the social studies. Achieving this objective may be easier if there is cooperation and a school-wide concern for the development of writing skills. As a part of the commitment to this goal, evaluation of written assignments in social studies must go beyond mere assessment of content and include evaluation of the quality and clarity of writing as well.

Because written communication is limited to the specific symbols on paper, the need for well-developed writing skills is all the more critical. Spoken communication can be supported by non-verbal communication including gesture, facial expression, and tone of voice to ensure accurate reception of the message. Such opportunities to reinforce and enhance the effectiveness of written communication

are not available to the writer. This is an additional justification for a greater effort to help students develop and improve their writing skills.

Writing skills are not casually acquired; they are learned gradually and require thoughtful effort and hard work on the part of the learner. As with most learning skills, writing will not be learned unless something rather obvious is to be gained from learning to write.

SAMPLE LESSON: Using newspapers or current newsmagazines to develop skills in writing a paragraph.

OBJECTIVE: Given an article from a current periodical, the student should be able to identify topic sentences correctly. Given individual and disorganized sentences from a paragraph in a news article, the student should be able to reassemble the paragraph in proper order.

1. Review with students the definitions and importance of the following: paragraph, topic sentence, and paragraph development.
2. Distribute selected articles from current newspapers or newsmagazines that deal with a specific event or news development. (An alternative might be to ask students to bring to class an appropriate article.)
3. Direct students to circle the topic sentence within each paragraph. Check the assignment in class to be sure students have learned the unique characteristics of topic sentences and how to identify them.
4. Divide the students into small groups of 3-5. Give each student within a group one sentence (on a 3x5 card) from a well-written paragraph. The paragraphs could be from a current periodical or developed by the teacher.
5. Each group should be directed to work together to reassemble a unified paragraph. Then they should compare their efforts with the original paragraph.
6. If each group initially receives a different paragraph, they could exchange paragraphs so each group could work with more than one.
7. When all groups have finished, analyze what students have learned from the lesson.

SAMPLE LESSON: Using an activity to develop skill in writing a paragraph.

OBJECTIVE: Given a description of three candidates for a public office, the student should be able to rank the candidates and write a brief paragraph that explains the reasons for his ranking.

1. Distribute the assignment (see next page) and review the directions at the top of the page.
2. Ask students to study the material available on each candidate, then rank the three candidates for Supreme Court Justice, indicating the first, second, and third choices.
3. Next students are to prepare a brief paragraph explaining the reasons for selecting the candidate of their choice. The paragraph should contain a topic sentence, complete sentences, and clearly justify their choices.

THE APPOINTMENT OF A JUSTICE TO THE U.S. SUPREME COURT

(Directions: Imagine that you are President of the United States. One of the Supreme Court Justices has just written to tell you that he will retire at the end of the calendar year. You have asked the Attorney General to prepare a list of possible candidates for you to choose one to nominate. The Attorney General has given you the following three names. Each name was checked with the American Bar Association and has been given a good rating. Each name has also been discussed informally with members of the Senate Judiciary Committee (the committee. So, you could successfully appoint any one fo the candidates. Whom will you appoint and why? After you have studies the qualifications of each of the candidates, write a brief paragraph giving the reasons for your selection.)

CANDIDATE A: Mr. Green is a well-known law school professor and a specialist on the Supreme Court. He has written many fine books and articles on the Supreme Court. He has had more of his students chosen as law clerks to Supreme Court Justices than has any other professor in the U.S. He is a good personal friend of three of the Justices now on the Court. He has never been a candidate for any political office. He has never been associated with any political party. He is 55 years old.

CANDIDATE B: Mr. Weber is your Attorney General. He is a long time friend and political supporter of yours. He has spent most of his life in political office -- first as a state legislator, than as Governor, and later as U.S. Senator. When you were elected as President, he left a very profitable private law practice to become your Attorney General. He has always been active in state and national politics. The two of you think alike on most political matters. He has never been a judge. He is 57 years old.

CANDIDATE C: Mrs. Anderson is a Federal District Court Judge. You appointed her as a judge two years ago at the urging of her friend, Senator Sam Brown. Judge Anderson has proven to be a very hardworking judge. She is well-respected by other Federal judges for her opinions and her decisions. She has been named one of the Ten Outstanding Women in America by the Gallup Poll every year for the past five years. She is 55 years old.

(Adapted for American Political Behavior, Mehlinger and Patrick, Ginn and Co., 1972, pp. 389-399)

SAMPLE LESSON: Using an activity to develop skill in precis writing.

OBJECTIVE: Given a newspaper editorial, the student should be able to write a précis, summarizing the main ideas in no more than one-third the number of words in the original editorial.

Précis (pronounced pray-see) is a French word with the same root as our word "precise." The précis is somewhat like a summary, but it is briefer and more concise. It tells in as few words as possible the main ideas of a study, an article, an editorial, or any other piece of writing. It omits all details and illustrations. It includes no opinions or elaborations by the précis writer. Because of its limitation in length, a well-written précis is an indication of: 1) how well the reader understands the writer's ideas and train of thought; 2) how well the reader can select the ideas that are most important and omit those that are not essential; and 3) how accurately, clearly, and concisely the reader can restate the material in his own words.

How to write a précis. (Give these directions to your students.)

1. Select an article, newspaper editorial, or essay by a news columnist that deals with an important event, policy, or problem.
2. Read the selection carefully, making certain you understand the main ideas.
3. Using your own words, write a summary of the train of thought, paragraph by paragraph, in concise sentences.
4. List brief phrases that summarize topic sentences. Do not include details, illustrations, or examples.
5. Now write a paragraph using the summary and phrases you wrote in 3 and 4 above. In your own words state the main ideas simply and clearly.

6. Limit your précis to no more than one-fourth to one-third the length of the original editorial or selection. If it is longer, try again, making it still more concise.

Here is a sample of précis writing to illustrate how it is done.

Original

"Understand that you can have in your writing no qualities which you do do not honestly entertain in yourself. Understand that you cannot keep out of your writing the indication of the evil or shallowness you entertain in yourself. If you love to have a servant stand behind your chair at dinner, it will appear in your writing; if you possess a vile opinion of women, or if you begrudge anything, or doubt immortality, these will appear by the way you leave unsaid more than by what you say. There is no trick or cunning by which you can have in your writing that which you do not possess in yourself."

--Walt Whitman, Memoranda for
LEAVES OF GRASS

Precis

Your writing cannot disquise an evil or superficial character. Whatever you love, hate, begrudge, or doubt will be revealed, sometimes by leaving things unsaid. No subterfuge can give your writing qualities you do not have yourself.

SUMMARY: STUDY GUIDE

The following consists of the procedures to consider in teaching students how to summarize.

I. What is a summary?

Conduct a directed discussion to give the students an understanding of the concept summary. The teacher might ask the question, "Who can tell us what a summary is?" This will serve as a starting point in arousing interest and focusing attention on the word "summary." Write the answers to the questions on the blackboard so that the teacher and students can together formulate a compact definition. A variety of words or expressions -- some of which are synonymous -- may be used to illustrate these characteristics.

A. Compactness

1. point form
2. outlining
3. classifying

B. Brevity

1. brief
2. condensed
3. concise

C. Clearness

1. accuracy
2. clarity
3. logical
4. exactness

D. Expression

1. key (big, main, essential, significant); ideas (points)
2. gist of the matter
3. generalize with meaning
4. what is important
5. key episode
6. not copying -- facts and ideas in students' own words

E. Unity

1. structure
2. sequence
3. point of view

II. Why summarize?

A. note-taking
B. studying
C. experience in expression
D. apply principles to develop mastery in the skill
E. aid discrimination

F. give students a sense of mastery or feeling of accomplishment
G. develop concentration
H. learn how to minimize the confusion of facts
I. provide practice in self-evaluation
J. aid in vocations

1. doctor -- compiling records
2. minister -- preparing sermon
3. politician -- preparing a speech
4. businessman -- recording, classifying and unifying information
5. farmer -- cataloguing notes on methods of feeding and breeding
6. salesman -- recording business activities

III. Do some summarization

Direct the students to a specific paragraph and have them summarize it using the following steps:

A. Read the paragraph through once to get the main thought. Write this thought on a piece of paper so the teacher may check it. Caution the students that summarizing means putting facts and ideas in one's own words.

B. Re-read the paragraph to decide which point from each sentence should be incorporated into the summary. Also decide how each important fact may be woven into a meaningful summary. At this point it would be advisable to have cooperative effort between teacher and student and student and student. In the simplest summary, a point-form or sentence summary, not more than one or two thoughts would be incorporated into the summary.

IV. Continuing the development of the skill of summarization

Read another paragraph for the main thought. Re-read, noting individually the thought in each sentence to be used in the summary. This time the teacher and student may choose whether each individual makes up his or her own summary this time or constructs it cooperatively again. Upon completion, no matter which method was used, a comparison of the final products will take place and any marked improvements or glaring errors will be brought to the attention of the class. This may be done by having several summaries read and constructively criticized. A few summaries may be written on the blackboard to be analyzed or several posted cn a bulletin board to point out various aspects of the summaries.

V. Frequent review is necessary

The following questions asked by the teacher will serve to inform the student and the teacher of the level of understanding of the skill in summarization achieved by the student.

-- "What is a summary?
-- "What are its uses?
-- "What is the purpose of the first reading?"
-- "What is the purpose of the second reading?"
-- "What types have we studied thus far?"

Students having difficulty may be given extra guidance. Those having difficulty summarizing would have to further practice this skill while other students might begin practicing the development of another skill.

VI. Extending the use of the summary

After the students have gained sufficient proficiency, material other than the textbooks may be used. They should be encouraged to extend their range as much as possible and practicable. Materials such as films, poems, stories, filmstrips, and taped programs might be used.

VII. Testing the students' abilities to summarize

The students can be asked to summarize material entirely new to them. An opportunity should be made for student self-evaluation of his or her summary of the test in addition to teacher-evaluation. The existence of a cooperative evaluative atmosphere will prove beneficial to overcome any remaining difficulties as well as present the opportunity for the teacher to give credit where credit is due.

The above procedure should serve only as a guide for teacher and student. The teacher and students should not bind themselves to this procedure absolutely, for the development of skills should be on an individualistic basis. Each student progresses at his own unique pace and embraces his own unique problems in developing a particular process or skill.

Things to Think About When You Write

In all composition activities, certain rhetorical elements must be considered. These elements are: Concepts, Qualities, Processes and Forms.

A. *Concepts*

1. *Subject* - topic or point of central focus; selected as appropriate to audience, purpose and occasion; delimited in these terms; expanded from narrow topic by considering other concepts

2. *Audience* - three senses of audience:

   a. Me - writing for oneself
   b. You - writing for a rather specific other person or persons
   c. "Other you" - the "unknown you" or generalized audience

3. *Purpose* - intent; function; reason; justification for the writing

   e.g. writing to ask
   writing to inform
   writing to explain or describe
   writing to direct writing to enjoy

B. *Qualities*

1. *Thesis* - main idea sentence; states and limits the topic. It is typically a declarative assertion and normally begins the paragraph.

   Attributes:

a. Clarity -
Is what you are writing about clear to you?
Can others understand what you are writing about?

b. Suitability -
Does your topic sentence fit the audience? The subject? The purpose? The occasion? Will the intended audience read your writing?

c. Completeness -
Does your topic sentence say everything it needs to say? Does it say too much?

2. *Sentence Structure*

   a. Clarity -
   Do your sentences and words make sense?

   b. Suitability -
   Are your words right?
   Did you choose the best words?

   c. Completeness -
   Do your sentences say everything that needs to be said about your topic?

d. Unification -
Do your sentences talk about the same thing?
Are they in the right order?

e. Consistency -
If your story is happy, is it all happy?
If your story is sad, is it all sad?
If your sister is telling the story, does she do all of the telling?
If your sentences are written in the past, are they all in the past?

3. *Idea Development*

a. Clarity -
Is your main idea clear?

b. Completeness -
Have you said all you need to say about your idea?

c. Unification -
Do all of your sentences deal with the main idea?
Are your sentences in the best order?

C. *Process*

1. *Invention* - What do you want to write about?

2. *Planning* -

decide on reasons for writing
decide on outline or plan
decide form in which the writing will be done
decide who will do the telling
decide the order in which events or ideas will appear
decide on what will be included
decide on the way in which it will be written
decide on how it will end

3. *Presentation* - draft, revision, final copy; method of presenting, e.g., read by the teachers, posted, orally presented, etc. Illustrated? Graphics?

4. *Evaluation* - Does your writing show those things you planned?

5. *Awareness* - Have you improved in this writing?
Are there skills you still need to work on? What are they?

D. *Forms*

1. Reportive writing--writing which conveys information or explanation without personal judgment. Writing which describes a setting, person, object, or situation without judging it.

2. Persuasive writing--writing in which the writer takes a personal stand and uses various processes and techniques to get the audience to agree with him.

3. Narrative writing--writing in which the writer describes a topic sequentially.

4. Poetry writing--writing in a range of poetic forms, e.g. couplet, haiku, etc.

5. Dramatic writing--story accounts in dramatic form.

UNIT FOUR

OBSERVATION SKILLS

"The eye -- it cannot choose but see;
we cannot bid the ear be still;
our bodies feel, where'er they be,
against or with our will."

-- William Wordsworth

Definition

Visual impressions are all around us, some vivid and lasting, others fleeting and easily forgotten. We learn much from graphic materials, and the stronger and more distinct they are, the greater impact they have. The power of visual experiences to influence our beliefs and behavior is suggested in the expression "seeing is believing." However, learning is no inevitable by-product of seeing. We may see an object or event, but not really learn much about it. For instance, to glance at a picture casually, briefly, is quite different from examining the same picture thoughtfully, giving careful scrutiny to details, studying its composition. We may view an object carelessly without sensing its significance or realizing anything unique or different about it. To learn from observation demands thoughtful consideration, attention to details, and experience and knowledge of what to look for. By nature we are equipped to see; we learn how to observe, how to interpret the meaning of what we observe. It may or may not be true that "you can observe a lot just by watching." Much depends on what we have learned to look for, how skilled we are at observing.

There is more to observing than first meets the eye. Observation skills are complex, and to master them takes time and practice. What we perceive is never gained directly from the world around us. Our mind functions as a go-between,

mediating and interpreting, attempting to give meaning to what we see and hear. C. E. M. Joad wrote: "We never get any impression of the world raw. It is always cooked; and from the culinary operations of the mind there is no escape."

Our perceptions of the world are always shaped by at least four factors: (1) how well we perceive clear and distinct images; (2) how we feel, our physical condition (i.e., tired, alert); (3) how we react emotionally to what we see (i.e., pleased, indifferent, hostile); and (4) "the knapsack of our past," the unique bundle of personal experiences and the cultural background that helps us interpret and give meaning to our visual experiences. William James noted the importance of the "knapsack of our past" when he wrote: "Whilst part of what we perceive comes from the object before us, another part (and it may be the larger part) always comes out of our minds."

Visual materials are widely used and important tools of instruction in the social studies. Visual materials include: pictures (both photographs and drawings), cartoons, graphs, charts, tables, diagrams, posters, films, and filmstrips. (Note: Maps and globes are obviously graphic materials. However, because these two forms are unique to the social studies area, a separate section has been allocated for discussion of the skills needed to interpret maps and globes.)

Much as visual materials are used in the social studies, their effectiveness as an aid to learning is reduced if learners are ill-equiped with observation skills. These visual skills include: knowing how to read and interpret charts, graphs, and tables; how to examine and understand pictures, cartoons, and drawings; how to learn from films, filmstrips and videotapes.

The Need for Observation Skills

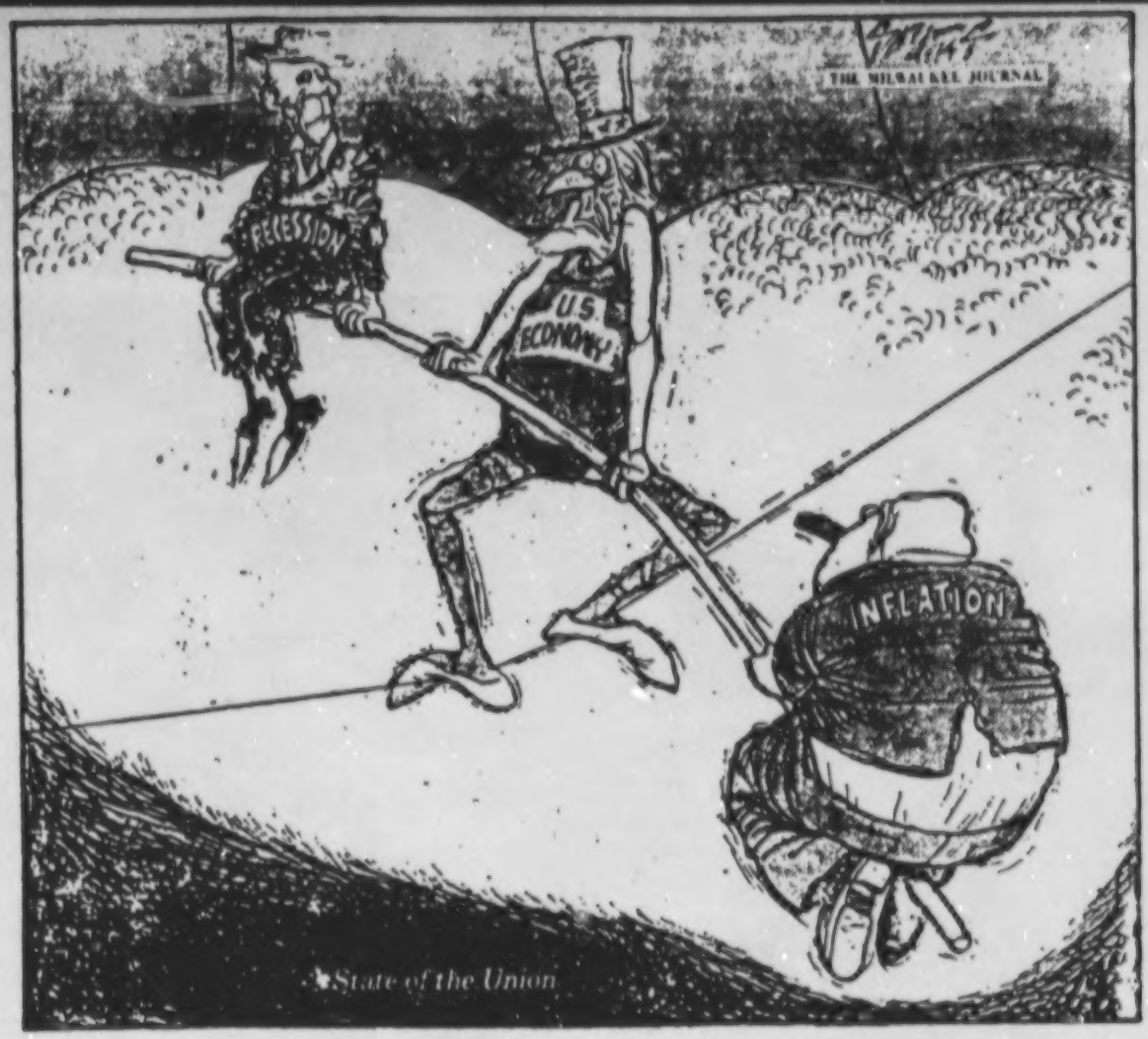
Why do we need to be skilled observers? Why should students learn visual skills in social studies? The simple truth seems to be, much of what we learn

comes to us visually. Observation skills are basic tools for learning; they help us to learn. If we possess these skills we can learn efficiently and well, but if our visual learning skills are poorly developed or lacking they restrict and unnecessarily limit our opportunities to continue learning and lead inevitably to poor achievement. Perhaps much of what we learn in school may be forgotten or become obsolete, but observation skills continue to be functional as long as they are used. Skills such as these are among the most permanent of learnings and can be used throughout life.

To understand the world about us, we need to develop the ability to read and interpret the various graphic means through which information today is transmitted. Visual presentations confront us everywhere -- in magazines, books, newspapers, pamphlets, advertising, campaign literature, instructional materials, displays, and exhibits; on television, posters, billboards, and films. The prevalence of visual presentations in American life today makes it most important that every citizen possess visual learning skills. We need only skim a few newspapers and magazines to be convinced that an ability to use charts and graphs, to interpret pictures and cartoons are an important kind of literacy. For most of us literacy still means basically the ability to communicate through the written and spoken word. But ours is increasingly an age of visual as well as verbal and written communication. To communicate -- to <u>decode</u> and <u>encode</u> -- visual messages is essential if we are to understand and interpret much of the information we receive daily. Further, visual presentations excel in eye-catching qualities and in the simplification of ideas. They may easily misrepresent or misinterpret the truth. So, we must be skilled and skeptical. As John Jarolimek has noted: "We are subjected daily to a tremendous volume of misleading and conflicting persuasive information, much of it in the form of very convincing graphic materials ... If the citizen did not discount much of what he reads and hears in the way of

advertising, oratory during political campaigns, sales talks in major purchases, 'scientific proofs' of all sorts -- well-documented with charts, graphs, and other "facts" he would find himself deceived at every turn...As the individual citizen becomes more discriminating in his choices, the likelihood of deliberate misrepresentation will be minimized."

> "There is a magic in graphs. The profile of a curve reveals in a flash the whole situation -- the life history of an epidemic, a panic, or an era of prosperity. The curve informs the mind, awakens the imagination, convinces. Graphs are pure quantity, stripped of verbal sham, reduced to dimension, vivid, unescapable. Wherever there are data to record, inferences to draw, or facts to tell, graphs furnish the unrivalled means whose power we are just beginning to realize and to apply."
>
> -- Henry D. Hubbard



"First the good news . . . When you were a boy your Uncle Franklin D. set up a trust fund for your retirement years. The bad news is some scoundrel seems to have spent it all!" 11/7/77

67

"Old, ill and broke! So, what do you want, troublemaker?"

PLEA BARGAINING APPROVED BY SUPREME COURT

AND SO I'VE DECIDED TO TAKE MY ENERGY PROGRAM TO THE ONES WHO REALLY ARE IN TUNE WITH OUR ENERGY NEEDS AND WHO REALLY KNOW AN ENERGY CRISIS WHEN THEY SEE ONE...
...The American People
ZZZ...
MARSHALL

Marshall—Richmond News-Leader

"How sick may I get for $537?"

Cartoons reprinted with permission.

SAMPLE LESSON: Using tabular data to develop skill in constructing and interpreting a simple line graph.

OBJECTIVE: Given the basic statistical data, the student should be able to construct a simple line graph, summarize its meaning in a brief paragraph, note important facts, and indicate conclusions that are supported by the data.

NEW ORDERS FOR NUCLEAR REACTORS BY ELECTRIC POWER COMPANIES

1967 -- 30 reactors	1971 -- 25 reactors	1975 -- 4 reactors
1968 -- 14 reactors	1972 -- 33 reactors	1976 -- 3 reactors
1969 -- 8 reactors	1973 -- 36 reactors	1977 -- 4 reactors
1970 -- 15 reactors	1974 -- 27 reactors	SOURCE: Newsweek, Oct. 31, 1977, P. 65

1. Directions: On the blank graph form provided, each vertical line should represent one of the dates on the above table. Start with 1967 at the left and end with 1977 at the right. Put these dates at the bottom. The horizontal lines represent new orders for nuclear electric power generating reactors. Use the first vertical line at the left to represent orders for new reactors. Each interval starting with zero at the bottom represents new orders for five (5) nuclear reactors. The top line would represent 40 new orders. Put the appropriate number at each interval.

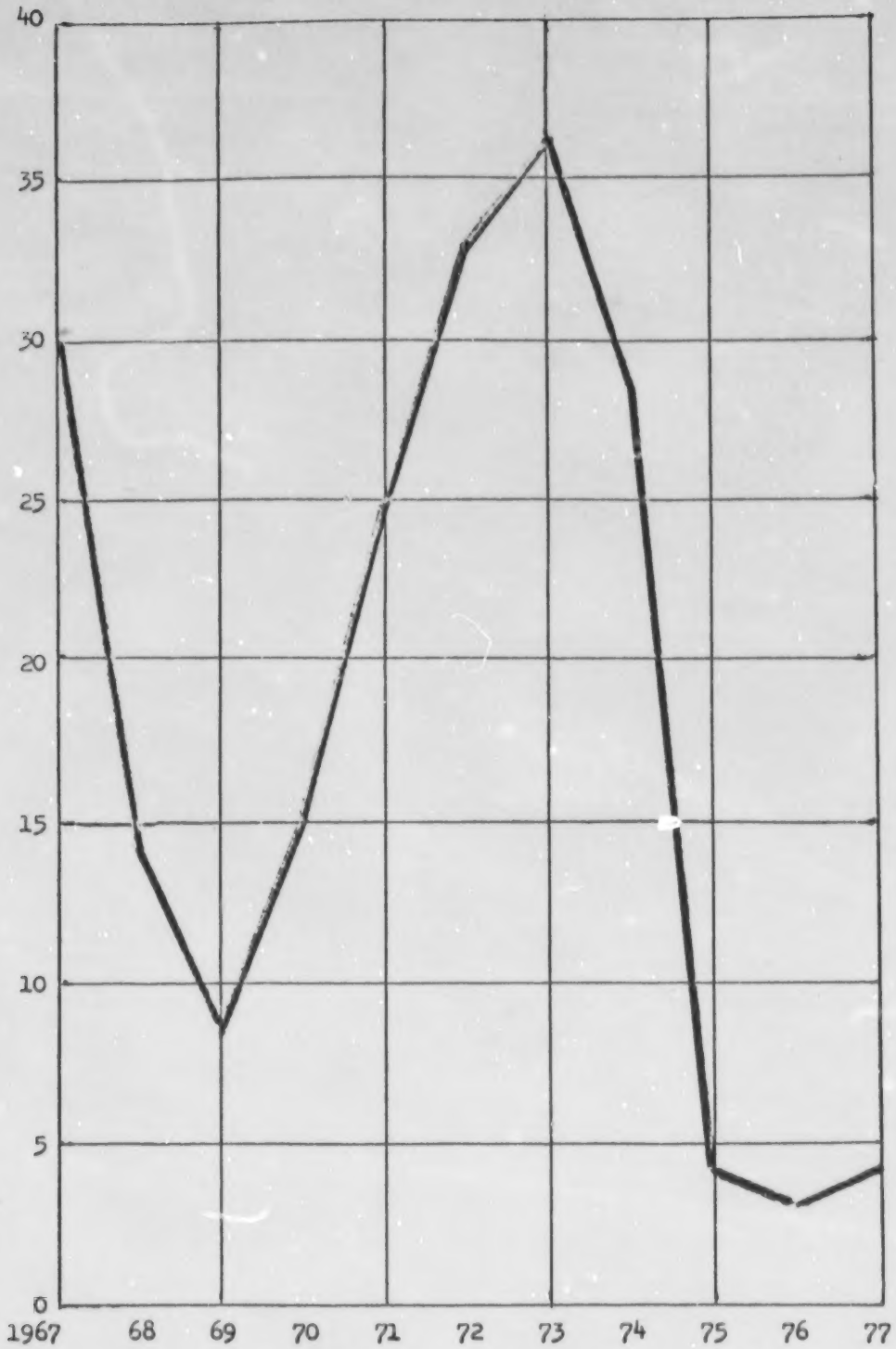
   The next step is to place a dot on each date line at the point that corresponds to the number of new orders for nuclear reactors in that year. Connect the dots with a solid line, give the graph a title, and indicate the source of the data.

2. Direct students to summarize in a paragraph the information contained in the graph. What important facts should be noted?
3. What significant conclusions are supported by this data?
4. What reasons might there be for the sharp decline in new orders for nuclear reactors?

5. What might be some of the possible consequences of this development on the future demand for and supply of electric power?

(Note: The graph presented below has the line drawn to the proper points to show how a correct response would look. In using this sample lesson, the graph form would obviously be blank.)

NEW ORDERS FOR NUCLEAR REACTORS



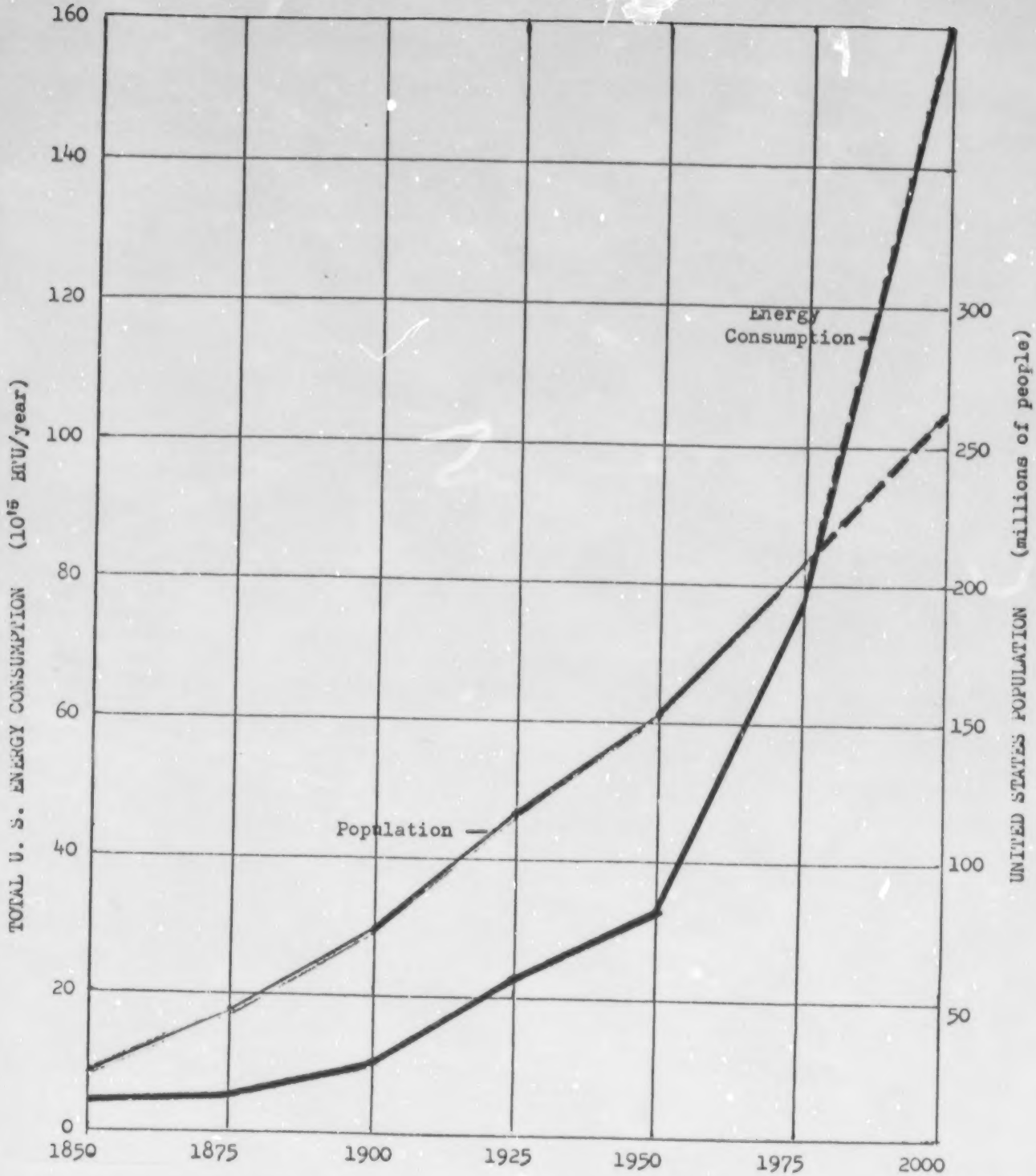
SOURCE: NEWSWEEK,

SAMPLE LESSON: Using a line graph to develop skill in graph interpretation.

OBJECTIVE: Given a line graph showing total U. S. energy consumption during the period 1850-2000, the student should be able to summarize its meaning and significance in a paragraph, note important facts, and indicate conclusions and generalizations supported by the data.

1. Provide students with a copy of the accompanying chart on U. S. energy consumption.
2. Direct students to identify the central issue dealt with in this graph.
3. Ask students to determine what underlying assumptions were made by the person who prepared the graph. Is the material visualized from any particular standpoint? Is anything taken for granted without proof? What facts, if any, are assumed?
4. Direct the class to evaluate the evidence presented in the graph. Students should ask such questions as: What does the artist want the viewer to believe? For what purpose was the graph prepared? Are the facts true? Can the data be checked? Are the sources given? Are some of the facts unverifiable? Are the projected data (future estimates) reasonable, and how were they determined?
5. Ask students what warranted conclusions and generalizations may be drawn from the available data? A conclusion is an inference or deduction supported by established facts and not contradicted by any other set of facts. Students should be cautioned against drawing hasty and unwarranted conclusions from limited or unverifiable data.
6. If energy consumption continues to increase as the graph suggests, what effect might this have on fuel reserves? Prices? Our environment?

U. S. ENERGY CONSUMPTION AND POPULATION -- 1850 - 2000



SOURCE: STATISTICAL ABSTRACT OF THE UNITED STATES - 1977

SAMPLE LESSON: Using a 100 percent bar graph to develop skill in graph interpretation.

OBJECTIVE: Given a bar graph showing the composition of energy consumed in the United States by various sectors of the economy, the student should be able to explain its meaning and significance in a paragraph or two, noting important facts, and indicating several conclusions and generalizations supported by the data.

1. Provide students with a copy of the accompanying chart on the composition of energy consumed in the United States by various sectors of the economy. Then direct students to respond to the following questions. Students are to use the following symbols in answering each question.

   1. For coal 2. For natural gas 3. For oil 4. For hydro
   5. For nuclear 6. For electric

(3) 1. Which energy source showed an increase in <u>every</u> sector of the U. S. economy in the 1947-1976 period?

(5) 2. Which source of energy produced electrical power in 1976, but was unavailable in 1947?

(1) 3. Which energy source showed a decrease in <u>every</u> sector of the U. S. economy in the 1947-1976 period?

(2) 4. What was the leading energy source consumed by industry in 1976?

(4) 5. Which energy source showed the biggest decrease in the percent of total electric power generated?

(1) 6. Which power source suffered the biggest losses when the railroads shifted from steam power to diesel engines?

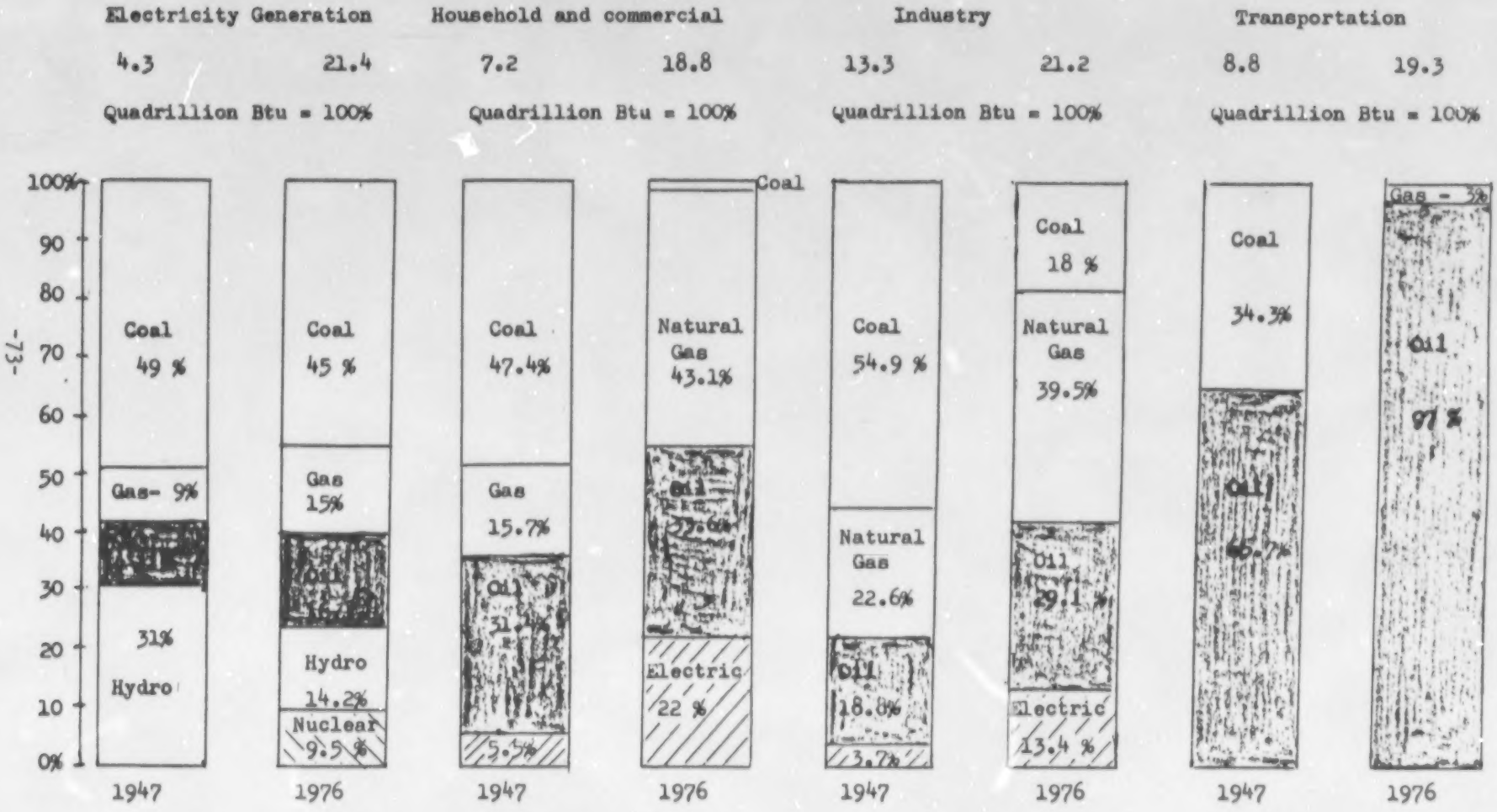
(1) 7. In 1947 what was the major power source for U. S. industry?

(2) 8. Almost 40 percent of the power for U. S. industry in 1976 was provided by what source of energy?

(3) 9. In 1976 one-third of the energy consumed by households and commercial users came from what energy source?

(1) 10. Which energy source provided the biggest single power source for generating electrical energy in 1976.

COMPOSITION OF ENERGY CONSUMED BY VARIOUS SECTORS OF THE U. S. ECONOMY



SOURCE: The Conference Board, Road Maps of Industry, December, 1977

SAMPLE LESSON: Using simple circle graphs to develop skill in graph interpretation.

OBJECTIVE: Given two circle graphs showing anticipated revenue and spending for the 1979 federal budget, the student should be able to demonstrate the ability to interpret the information by correctly responding to at least eight of the ten questions on a test.

(Directions: Study the accompanying chart of the 1979 federal budget, then respond to the questions below. Use the following symbols in responding to each question.)

1. Proved by studying the chart.
2. May or may not be true, but proof is not in the chart.
3. The chart proves the statement wrong.

(2) 1. The 1979 federal budget will be just over $500 billion.

(1) 2. The federal government expects to receive more revenue from individual income taxes than any other single source.

(1) 3. Eight percent of the federal budget in 1979 will be used simply to pay the interest on the federal debt.

(2) 4. More money should be provided in grants to states and localities in the 1979 budget.

(1) 5. Tax revenues will not be sufficient to cover all the spending anticipated in the 1979 budget.

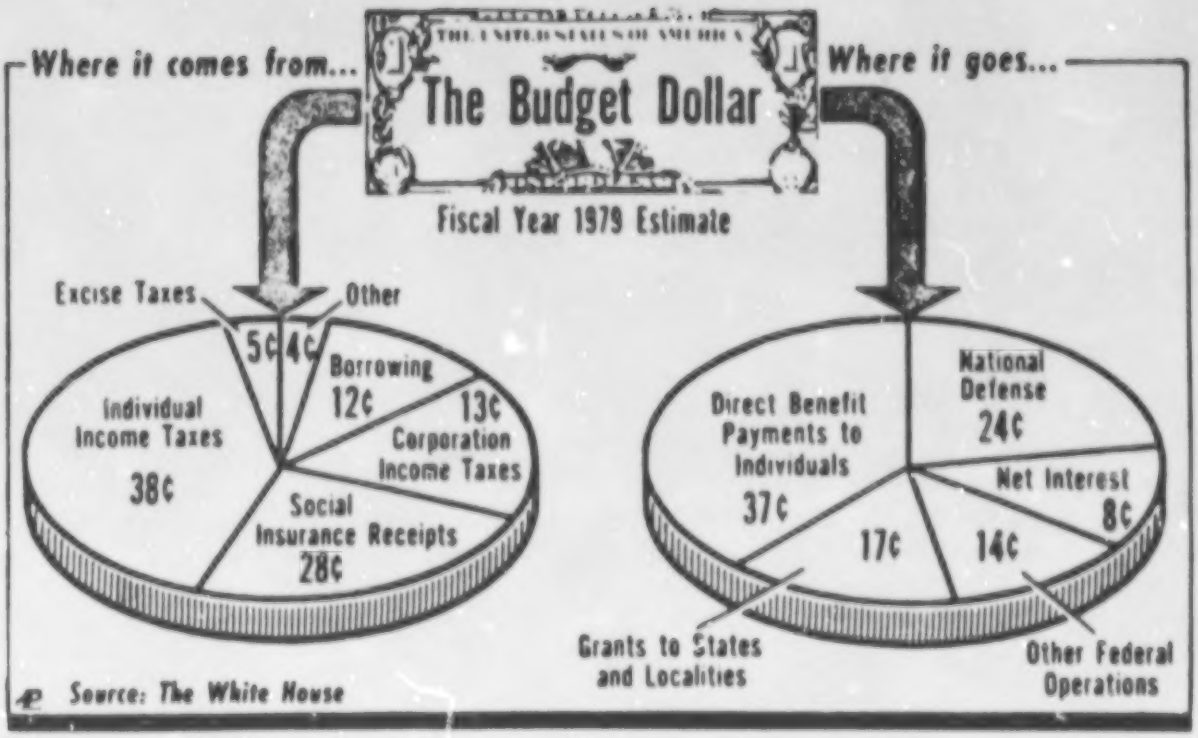
(3) 6. Spending for national defense will be the largest single item in the 1979 federal budget.

(2) 7. The Social Security Program will bring in more revenues in 1979 than ever before in its history.

(3) 8. Corporations will pay more money to the federal government in 1979 than will be collected from individual income taxpayers.

(3) 9. Federal spending will just about balance federal revenues in fiscal year 1979.

(2) 10. The 1979 federal budget is the largest peacetime budget ever submitted to the Congress of the United States.


Where it comes from...
The Budget Dollar
Fiscal Year 1979 Estimate
Where it goes...
Excise Taxes
5¢
Other
4¢
Borrowing
12¢
13¢
Corporation Income Taxes
Individual Income Taxes
38¢
Social Insurance Receipts
28¢
Direct Benefit Payments to Individuals
37¢
National Defense
24¢
Net Interest
8¢
17¢
14¢
Grants to States and Localities
Other Federal Operations
Source: The White House

SAMPLE LESSON: Using tabular data to develop skill in understanding and interpreting a table.

OBJECTIVE: Given the basic statistical information comparing various socialist and capitalist nations, the student should be able to demonstrate the ability to interpret the information by responding to at least eight of ten questions correctly on a test.

(Directions: Study the accompanying table comparing various socialist and capitalist nations, then respond to the questions below. Use the following symbols in responding to each question.)

1. Proved by studying the table.
2. May or may not be true, but proof is not in the table.
3. The table proves the statement wrong.

(1) 1. South Korea spends more per capita for health than does Tansania.

(1) 2. The socialist countries tend to have fewer autos than do the capitalist countries.

(2) 3. Public transportation is generally better in nations that have few private automobiles.

(3) 4. No socialist country enjoys more calories per capita per day than does the United States.

(1) 5. Of the three countries that spend the most per capita on education, two of the three are capitalist countries.

(2) 6. From the data available in the table, the healthiest people (among the nations shown) live in China.

(3) 7. The people of China have more autos per 1000 than do the people of Kenya.

(2) 8. No nation in the world has better schools than does the United States.

(3) 9. The people of China have the poorest diet (in calories per person per day).

(1) 10. South Korea had the highest economic growth rate (as measured in real GNP per capita) in the period 1970-1975.

SOCIALISM V. CAPITALISM: A COMPARISON OF NATIONS

Nations	Growth Rate in Real GNP Per Capita 1970-75	Per Capita Public Spending on Education	Per Capita Public Spending on Health	Hours of Work to Buy a Pair of Shoes	Autos Per 1000	Calories Per Capita Per Day
Socialist North Korea	0.9%	$11.6	$11.6	39	1.0	2,664
Capitalist South Korea	8.2%	$35.0	$4.9	25	7.0	2,715
Socialist China	5.3%	$10.0	$2.0		0.1	2,330
Capitalist Taiwan	5.7%	$47.0	$20.0	7	22.5	2,791
Socialist Tanzania	2.9%	$5.2	$2.5	8	2.5	2,002
Capitalist Kenya	2.4%	$14.4	$5.4	8	11.0	2,114
Socialist U.S.S.R.	3.1%	$136.4	$155.8	18	18.5	3,542
Capitalist United States	1.6%	$401.7	$273.4	3	512.9	3,504

SOURCE: Time, 13 March 1978, p. 35 -- Latest available figures

SAMPLE LESSON: Using an editorial cartoon to develop skill in cartoon interpretation.

OBJECTIVE: Given an editorial cartoon dealing with a current problem, the student should be able to demonstrate the ability to understand and interpret the cartoon correctly by: (1) explaining the meaning of the cartoon in a brief paragraph, (2) noting how exaggeration has been used by the cartoonist, and (3) identifying the bias present in the cartoon.

Cartoons are the most symbolic of pictorial materials. Using satire, exaggeration always, and humor often, cartoons present a single viewpoint (frequently on controversial issues) in a concise and arresting style. Cartoons make heavy use of stereotypes which, of course, are completely symbolic. Interpretation of the cartoon is impossible without knowledge of what the symbols stand for. The meaning of a cartoon cannot be derived by trying to see relationships or draw inferences. Cartoonists communicate in a language of their own, highly symbolic, oversimplified, often biased. To interpret a cartoon correctly requires thorough and critical examination along with a knowledge of the meaning of special symbols and terms. Cartoons are popular and are regularly found in newspapers and magazines. They provide rich and abundant opportunities for developing critical thinking skills. Here is a simple scorecard to use in evaluating assignments involving cartoon interpretation.

Bill Mauldin

"HOW SICK MAY I GET FOR 537 DOLLARS?"

FIELD NEWSPAPER SYNDICATE
401 NORTH WABASH AVENUE CHICAGO, ILLINOIS 60611

Reprinted with permission

CARTOON EVALUATION SCORECARD Date_____

Name_____

4 = Excellent 3 = Good 2 = Fair 1 = Poor

1. Meaning in your own words	4	3	2	1
2. How did the cartoonist exaggerate?	4	3	2	1
3. Recognition of bias	4	3	2	1
4. Understanding of symbols-examples	4	3	2	1
5. Agree or disagree with point of view expressed?	4	3	2	1

Comments: Total Score ☐

UNIT FIVE

TIME AND SPACE ORIENTATION - MAP AND GLOBE SKILLS

A Sense of Time & Chronology

To live in and understand the present, students need a sense of time and chronology. What do we mean by a sense of time? It includes a knowledge and understanding of how time is measured and of the units by which it is expressed. It involves the ability to tell time by the clock, to know the day of the week, the month and year. It also includes being able to understand and use less precise concepts such as "now," "then," "soon," "long ago," "after," "before," "last year," "next week," and many other terms that have a variety of meanings depending on the situation in which they are used and the habits of the people who use them.

A sense of chronology involves a feeling for the passage of time and means that the learner can arrange events in a sequence from earliest to most recent. The learner with a sense of chronology can view a separate or isolated event as a part of a development, the result or consequence of complex causes. The event can be placed in perspective with recognition that it may modify and influence other events simultaneously or later.

The Need for a Sense of Time and Chronology

We tend to separate the past from the future by what we call the present. It seems strange to realize that the present never really exists except for a brief moment in time and is gone almost as soon as we think about it. Nevertheless the present serves as a useful benchmark that allows us to identify and sequence events.

A sense of time is essential to seeing the connection or relationship between events. A sense of the chronological order of events can help in understanding what is happening today. Many of our comtemporary problems are rooted in the past. Persistent and difficult problems (such as crime, inflation, prejudice) are neither new or unique. Knowing what conditions, events, and circumstances have preceded the development of a problem may help in devising ways to cope more effectively with a problem.

Why is a sense of time important? Why is it important to know when something happened? A sense of time can help us put events in perspective, measure their immediate and long-range impact, determine whether consequences will be of short duration or long-lasting. A sense of time helps in understanding and accepting both continuity and change, two significant concepts from the study of history. To distinguish urgent matters from those that are merely important, a sense of time is highly useful.

Definition

People do not ordinarily have an accurate sense of place or direction. These are not inborn but learned. How to determine place or location, measure distance, determine direction are fundamental skills. To develop these skills we use maps and globes. Maps are graphic reductions that represent a portion of the earth's surface. Lines, colors, words, symbols, and signs are used to represent graphically a given area. Maps can show location, the distance between specific points, the size and shape of an area, physical features and topography. Maps can make clear in a symbolic way information that would take many pages of text to describe.

Various subskills are involved in learning to read and interpret a map. They include being able to do the following:

1. Orient a map and note directions.
2. Recognize the scale of a map and compute distances.
3. Identify and locate natural and cultural features on a map, locate places on maps and globes by means of grid systems.
4. Recognize and express relative locations, bearing in mind distance, physical features, available transportation, political barriers and other factors that may make one point more accessible than another.
5. Read symbols and understand and interpret the "language of maps."
6. Use information from a map to make intelligent conclusions and generalizations, to compare maps and make inferences.

The Need for Map and Globe Skills

People have always needed to know the answers to such basic questions as which way? How far? Where? The ability to read and interpret maps can help

provide answers to such questions. If an individual is to develop an accurate sense of place and space, the development of map and globe skills is essential.

From early on we experience a world of continually expanding personal horizons. Education, the media, and travel all make our world expand in terms of our contact with other peoples, other cultures, other areas. It is this enlarging personal world that requires the development of a sense of space and place. It is an important and unique responsibility of the social studies to help students develop the skills necessary to function effectively in a world expanding personal horizons. Maps and globes are the means whereby we may travel with our students into strange and unfamiliar worlds beyond our immediate horizons.

Skills involving the use of maps and globes should be taught as part of the daily activities of the social studies classroom. The major purpose is to develop the student's awareness of the geographical backgrounds of historical and contemporary events.

The many abilities needed for reading and interpreting maps and globes accurately are not inborn -- they must be developed over a period of time beginning with the early grades and continuing through high school. Learning to use maps and globes, as in the development of any skill, should take place when the student needs to consult or use a map for a specific purpose. Skill in the use of maps and globes develops gradually and should be definitely planned. Many geographic skills can be introduced to students in the early grades, but these skills need to be reintroduced, reviewed, maintained, and developed in the junior and senior high school if they are to become lasting.

Students learn to read and interpret maps with skills when they are given opportunities to make maps. When students work with maps they have made themselves they tend to view maps as tools for recording observations and for presenting the facts of an area.

There are many types of "do-it-yourself" map exercises that can be prepared with a minimum of difficulty. For example, students enjoy the challenge of filling in information on mimeographed outline maps. All schools are equipped with duplicating machines and there are a number of commercial sources for precut map stencils. Map workbooks are available that include blank maps and exercises relating map study to a particular topic in the social studies.

In addition to such exercises, students can participate in map studies at various times during classroom discussions. The teacher should not indicate a location on a map without first giving students the opportunity to perform this task. Students should indicate map locations in such a way that classmates may readily see the area under discussion. A pointer is invaluable for this purpose. An appropriate map, prominently displayed, affords many opportunities for expression of individual differences in skill and understanding. The student who cannot grasp the similarities and differences between the present Northwest and the old Northwest at the time of the Ordinance of 1787 will more readily perceive the difference if a map of the United States at the end of the Revolution is used concurrently with a map of the United States today.

Whenever a point is raised that can be illustrated by reference to a map and the appropriate map is not available, it is better to make a quick sketch, however primitive, than to verbalize without giving the class a chance to visualize. In simplest terms, the United States looks like a side of beef, Italy, a boot, England, an hour glass, Mexico a funnel. Incidentally, students may benefit as much as the teacher from the development of map-sketching skills.

Maps, of course, are made to provide information and are most often used directly for that purpose. The teacher today is blessed with a great variety of richly illustrated maps. In addition to the more traditional historical, political, and physical maps of nations and continents, a social studies classroom today may contain maps showing demographic developments, agricultural products,

industrial trends, climatic conditions, and so on. Maps are also available in a variety of interesting projections. Three-dimensional plastic relief maps for classroom use can be ordered.

The teacher must consciously and deliberately take advantage of these riches. Students must be exposed from day to day to the new "polar projections" as often as the old "mercators." Statistical studies and geographic surveys have made available large numbers of maps for enrichment and background information. How much more exciting it is to teach the economy of the USSR employing a map indicating industrial centers, minerals, and agricultural products! Textbooks, too, are illustrated with maps and plastic overlays to brighten class work and homework assignments. Frequently, major maps in the textbooks parallel larger wall maps; students at their desks can do map studies using their books as supplements.

In order to illustrate great events, trends and movements, it is necessary for students to employ one or more of the basic map skills. An obvious example is the use of maps in the study of the American Westward movement. If a class is restricted to one wall map, as is often the case, what procedures can be used effectively? The map must be read accurately for distance, directions, physical features, and topography. As in every lesson, the teacher should stimulate the young person's imagination through a pattern of questions: "If you were the wagonmaster of a train to Oregon, would you start from St. Joseph or Independence, Missouri? Why?" "What time of year would you start? Why?" "Show the class where you think you would be at the end of the first week." "Trace the route you would take; point out the physical barriers you would expect to meet; using the scale of miles on the map, how long would it take your wagon train to reach Portland?"

Systematic map consultation in the classroom is an integral part of the study of such historical developments as wars, revolutions, and migrations.

Maps and globes are indispensable in the study of the spread of religions and ideologies, the extent of conquests, the diffusion of cultures, and the spread of economic practices. Extensive use of the map and the globe can stimulate interest and imagination, thereby helping the teacher of the social studies reach his or her goal more readily.*

*Adapted from The Association of Teachers of Social Studies in the City of New York. Allyn & Brown, Inc., 1977.

SAMPLE LESSON: Using Time and Chronology

OBJECTIVE: Given a series of dates, the student should be able to discuss the importance of certain dates to his or her own life.

Go back into time 10 years and list 10 important national and/or international (by your definition) events and the dates of their occurrence. Alongside this list of 10 important dates, state your age at that time, place of residence, and memory of the event if any.

SAMPLE LESSON: Using maps to improve skill in place location.

OBJECTIVE: Given 20 map cards (with a small section from a state map on each card), the student should be able to identify correctly the state where each area is located for at least 15 of the 20 cards.

1. Use an old automobile atlas to cut out small sections from state maps to paste on 4 x 6 cards.
2. Each area selected should nowhere reveal the name of the state or its capitol.
3. Each area selected should be large enough to to provide sufficient clues to the perceptive and informed observer, but not so large as to provide so many clues that the identification is easy.
4. Number the cards from one to twenty.
5. Give students an opportunity to study each of the 20 cards and write down their answer on an answer sheet.
6. Correct the answers. As the answers are corrected have each student explain <u>how</u> the correct answer was determined. What steps were used to analyze each item? What clues revealed the correct answer? How were the clues check for accuracy?

(Source: Dr. R.E. McCollum, Temple University, Philadelphia, PA)

SAMPLE LESSON: Using spatial relationships and maps to develop a sense of perspective

OBJECTIVE: Given maps and other data sources, the student should be able to solve problems of location as well as present "world view" of others living in different locations on the globe.

Lesson A

Plan the itinerary for yourself for an around-the-world trip. You must visit each of the continents and you must complete your trip in 80 days. Your budget cannot exceed $2000.

Lesson B

Developing maps which show different perspectives.

Draw a "map" which would show how the world might look from the perspective of the following countries: South Africa, Australia, Iceland, USSR and Panama.

UNIT SIX

QUANTITATIVE SKILLS

Definition

Quantitative skills or skills of social mathematics include those abilities that are used when we measure social phenomena and communicate these measurements to others. These areas can be classified as skills of:

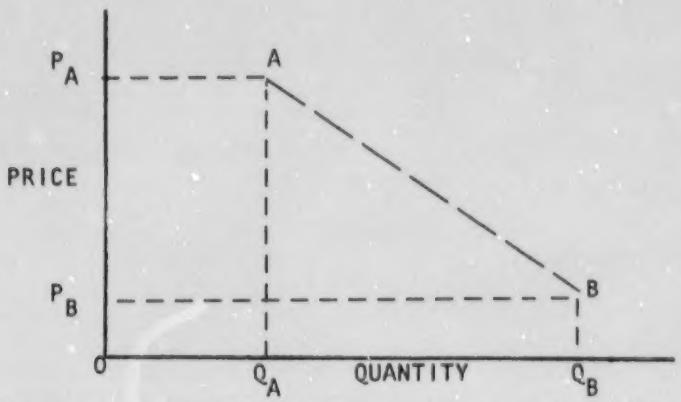
1. relations and functions
2. probability and statistics
3. measurement and approximation

Relations and functions deal with sets of numbers and sets of number pairs. For example, cost of living charts (money and time); height-weight charts or graphs (inches and pounds); temperature-time graphs (degree and hours) all show properties of relations. The relation is a set of ordered pairs.

In everyday life, we often use sets of number pairs or even sets of number triples or, for that matter, quadruples. In fact, the number of times that one needs single numbers is not very great. When the situation involves nothing more than counting, then a single number is sufficient to report or record the results. The number of eggs in a basket, the number of people in a particular state, and the number of dollars in your pocket are examples of such situations. Even here, however, more than one number may be involved if the time or place of counting must be recorded. In contrast, consider the items that you buy at a store. Here, number triples are usually involved. You must know the price per item and the number of items. This pair of numbers enables you to find a third number which you interpret as the cost of the purchase. What you have done in this case is use a number triple. Because to this and many other examples which

can be cited, it is not too surprising that the study of number pairs, triple. Because of this and many other examples which can be cited, it is not to surprising that the study of number pairs, triples and so on is very useful as a means of recording or studying events.

One vivid example of the above is the portrayal of supply and/or demand curves and the relationship between quantities and prices. What we see, of course, are relationships between prices and a schedule of amounts supplied and/or amounts demanded. If we plot a demand schedule, for example, we can see some interesting relationships.



Point "A" shows a relationship between price and quantity. At point "A" price equals $O\text{-}P_A$ and quantity equals $O\text{-}Q_A$. This suggests a relationship between price ($O\text{-}P_A$) and quantity ($O\text{-}Q_A$)...a set of number pairs ($O\text{-}P_A$, $O\text{-}Q_A$). Point "B" shows another relationship between price and quantity. At point "B" price equals $O\text{-}P_B$ and quantity equals $O\text{-}Q_B$. This defines a second number pair ($O\text{-}P_B$, $O\text{-}Q_B$). The relationship between price and quantity is the line AB which represents precisely the attitude of consumers. That is, they will tend to buy less at higher prices and more at lower prices. When all possible points between A and B are accounted for, we have a demand schedule. In this situation, we are dealing with the use of number pairs; we are using relationships.

The important thing for the secondary school student is to become familiar with the various ways to define relations, that is, pairs, formulas, tables, and

graphs. It is possible to use these items without defining in general what a relation means. However, the question "what is a relation?" is a natural one. It calls attention to the fact that we must be able to say, "that is the relation." On the one hand, the set of pairs itself seems a satisfactory choice, since if we know this set we know everything about the relation, and vice-versa. Thus, we say that a relation is a set of ordered pairs. Any set of ordered pairs is, accordingly, a relation. If we are given a set of ordered pairs, we may describe it graphically or by means of a formula, a rule, a sentence, or a table. But the relation is not the linguistic or pictorial devices used to talk about it. The relation is the set of ordered pairs. The relation is the generalization (equation) that describes all members of the set of ordered pairs.

Functions state a relationship that shows that one thing determines another. For example, in the formula "distance equals rate times time" ($d = r \cdot t$) we can say that distance is a function of time and rate, $d = f(r \cdot t)$ meaning that if we know the time and rate of speed we can find the distance. Or, in the formula $mv = pt$ where m stands for amount of money and v stands for velocity (the circulation of money) and p stands for price and t stands for total number of goods and services, we can say that p is a function of money times velocity divided by total number of goods and services; $P = f(M, V, T)$ or $P = \frac{MV}{T}$

Probability and statistics are methods for problem solving in the face of uncertainties due to incomplete information. This involves deciding what data are pertinent to the problem, collecting as many data as are feasible or necessary, organizing and presenting them, interpreting them, and finally, using them to make the decision which is most likely to be correct. However, this analysis might be applied to any kind of problem. A special feature of statistical problem solving is the use of the "theory of probability" in choosing the method of "sampling" the data and in drawing conclusions about the "population measures" from

the "sampling statistics." This special application of statistics might be stated as follows: statistics builds on the theory of probability, making it possible for us to infer the composition of a whole population from the composition of a properly chosen sample. When a national televison corporation asks a sample of citizens a series of questions about their reactions to particular programming, it is trying to find out what the reactions of all of us (the population) are to that programming.

Quantitative Concepts

A. Descriptive Statistics

1. Proportion

a. Percent

A percent is an amount or quantity commensurate with a number of units in proportion to 100: For example; 50% of the people means one half of the population; 50% of 100 is 50.

b. Ratio

A ratio is a relation of degree, or number. It is a relative amount. It is the relation between two numbers or two magnitudes of the same kind; especially the quotient of one magnitude divided by the other, or the factor that, multiplied by one, will produce the other. Ratio and proportion are related in that x/y is a ratio; while x/y = a/b is a proportion.

c. Index Number

An index number is any of a series of numbers indicating the quantitative time changes in a given statistical aggregate; such as prices, costs, etc. with reference to an arbitary base (usually 100) which

represents the status of the aggregate at a specific previous time or period. For example, farm prices are at 80% of parity. This means that farm prices are at 80% of a given base year. Cost of living figures are another example of index numbers.

2. Central Tendency

a. Mean

The mean score is the sum of the raw scores divided by the number of cases. Mean is also called average. For example, the raw score of 2+3+4+5+6 = 20; if you divide 20 by 5 (the number of cases) you arrive at the mean (4).

b. Median

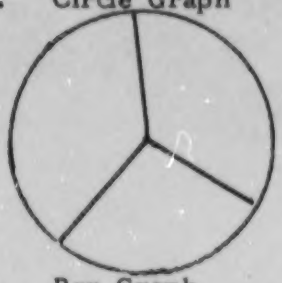
The median is that point in a distribution of scores with 50% of the cases on each side of it, the midpoint of a distribution. For example, in the distribution 2, 4, 6, 8, 10; 6 is the median.

c. Mode

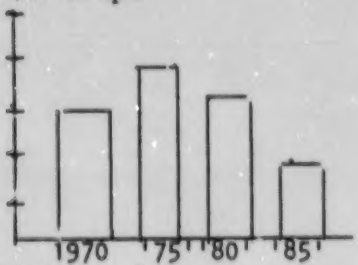
The mode is that score which appears most frequently in a set of scores. When scores are arranged in a frequency distribution, the mode is taken to be the midpoint of the interval containing the largest number of cases. Mode is the least frequently used measure of central tendency. For example, in the set of scores 2, 4, 6, 8, 8, 8, 6, 4, 2; 8 is the mode.

3. Types of Graphs and Data Displays

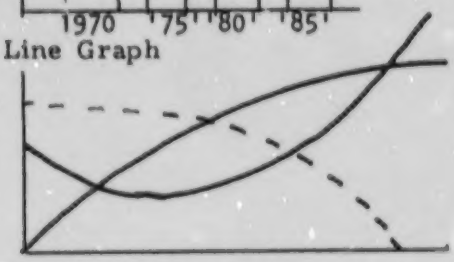
a. Circle Graph



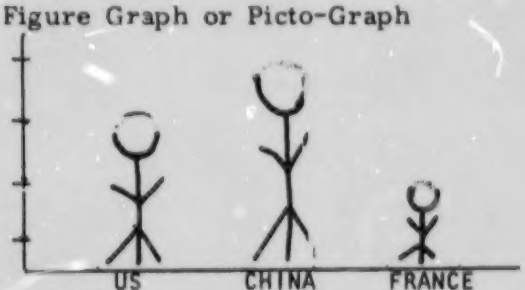
b. Bar Graph



c. Line Graph



d. Figure Graph or Picto-Graph



e. Density Map

B. Inferential Statistics

1. Probability and Chance

Probability deals with the likelihood of an event's occurring. We call this chance. In measurement, predictions are made in terms of probability statements, such as, the chances are 99 in 100 that such an event will occur.

2. Sampling

Sampling is the process of drawing a group from a population. A random sample is a sample so drawn that every individual in the population has an equal chance of being drawn into it. Random sampling is basic to the use of sampling statistics, that branch of statistics which is concerned with the making of inferences about population values based upon the value of a sub or smaller population.

The Need For Quantitative Skills

We might call quantitative skills or skills of social mathematics those abilities we need when doing simple computations at the grocery store or understanding the significance of a Gallup poll. Further, many statistical concepts are now commonly used in newspapers, on television and by politicans or business persons to communicate data. If the citizen is to be literate, then knowledge of such ideas as mode, mean, sample, population, randomness, probability, etc. is necessary. TV ratings, school evaluations, voting trends, employment and inflation ratios are all examples of social mathematics in everyday life.

SAMPLE LESSON:

OBJECTIVE: Students will develop a list of ways in which social mathematics is used in his or her day.

I Have students "keep" a one-day log on activities which demand the use of quantitative skills (i.e., making a purchase, figuring miles per gallon, reading graphs in textbooks or newspapers, etc.).

II Have students explore the ways in which the computer plays an important role in human affairs.

How will:

Communication	Voting
Entertainment	Leisure Time
Learning	Work

be affected in the future by increased use of computers?

SAMPLE LESSON:

OBJECTIVE: Students will be able to generate and display data relative to specific questions or concerns.

I Prepare a data display of the television viewing habits of your high school based upon a 10% random sample of the student body. Compare and contrast this data display with a similar display of viewing habits of the teachers using the same sampling procedures.

II Using the want ads of a city newspaper, prepare a data display of:

1. types and number of jobs available on particular days.
2. the percent change of jobs in one category in relationship to other categories over a period of time.

III The following raw scores were obtained by administering an intelligence test:

36	42	63	70	44	28	43	38
29	29	40	42	48	32	58	63
39	37	38	36	54	38	22	28
41	39	42	50	36	37	24	46
40	41	40	46	34	44	28	42

For these data calculate each of the following:

1) Mean
2) Median
3) Mode

UNIT SEVEN

PROBLEM SOLVING SKILLS

Definition

Problem solving is a complex intellectual skill that is called for when an individual encounters a situation where ordinary reaction or familiar ways of doing things are ineffective or don't work, and a new approach seems warranted. Applying intelligence to solving problems has been given many labels: problem solving, reflective thinking, critical thinking, inquiry, scientific thinking, to list a few. In spite of the different labels, all imply an internal process involving a set of sequential steps beginning with the perception and definition of a problem and ending with the development and testing of a possible situation.

In attempting to solve a problem, the learner may rearrange and reorganize available knowledge and information, and by doing so may begin to create new knowledge and insights where they did not exist before. This happens when the problem-solver attempts to infer by reasoning from particular facts to a general rule or conclusion, or by deduction when he attempts to test the validity of an idea or conclusion by applying it to a particular case.

Although problem solving is an intellectual process, emotional and environmental factors influence the problem-solving process and its results. Feelings, values, and attitudes as well as personality characteristics may facilitate or interfere with the thinking processes required in problem solving. The role of the teacher in helping students learn problem solving skills is to support and encourage, but bear in mind that "teaching isn't telling."

The Need For Problem Solving Skills

It is common knowledge that technological and social change are both rapid and accelerating. Accompanying changes of any kind are problems -- difficult,

disturbing, persistent, seemingly unmanageable problems. To cope with public or personal problems with any hope of even a little success demands skills in problem solving, decision making, and critical thinking.

Problems created by change are all about us. To be effective in coping with problems depends on skills -- individually and collectively -- to reason, to recognize alternatives, to gather data, to formulate hypotheses, to verify conclusions, to make intelligent decisions. These are some of the needed problem solving skills.

Experience tells us that most students find thinking and problem solving activities inherently interesting. Their potential to motivate the learner is far greater than the common factual-centered, content-oriented learning. Although most people will agree that thinking is an important aim of education and that schools should do all they can to provide opportunities for learning thinking skills, still thinking and problem solving skills continue to be neglected in many instructional programs.

Why do we want thoughtful citizens who are skilled in critical thinking and problem solving skills? Partly because the survival of our democratic society depends upon it. Democracy demands citizens who can think for themselves. A people that cannot or will not think about its problems will not long remain free and independent.

We know that problem solving skills can be learned, but the ability to think cannot be transmitted from one person to another. Each individual must learn the skills involved. It can be said flatly that the mere act of listening to wise statements and sound advice about thinking or problem solving will do little for anyone. Skills cannot in any wise be prepared and sold in packages ready for use. In the process of learning any skill, the active participation of the learner is essential. Skills (like knowledge) must be actively acquired; they cannot be passively absorbed. We learn problem solving skills through

practice. How skilled we become depends on the complexity and significance of the problems with which we work, our own interest and desire to participate in the task, the problem solving skills we use, and the initial guidance we receive in the development of these skills.

The fact is that problem solving skills are not easy or simple to learn. To be skilled in problem solving demands much training and a disciplined mind. Unfortunately, for many people, learning how to think clearly is too much trouble. They prefer to act on a hunch, on a feeling, on habit, on tradition, on impulse, or to follow others, or wait until there is a crisis. Rather, we need citizens who have developed the ability to make thoughtful decisions, who reflect upon problems before they act upon them, and who appreciate the worth, power, and usefulness of enlightened intelligence as a means to achieve the good life.

SAMPLE LESSON: Use of a news article to develop the skill of developing hypotheses.

OBJECTIVE: As a result of this activity, the students should be able to analyze community problems and develop alternative hypotheses for the resolution of these problems using a systematic problem solving approach.

1. Students have read a series of articles in the local newspaper focusing on poverty in their community. Previously they have:
   a. identified the problem
   b. investigated symptoms of the problem
   c. studied aspects of the problem
   d. defined the problem
   e. studied the scope of the problem
2. a. Lead discussion to explore the question, "What thoughts do you have about WHO is responsible for attacking (solving) this problem?" (Anticipate government levels, community organizations, and the poor themselves among the answers.)
   b. Help students develop statements of these hypotheses. (Example: The most effective solution to the problem of poverty is for the poor to help themselves.)
3. Divide the class into three separate subcommittees to study and explore different solutions to the problem of poverty within the community:
   a. The first subcommittee can investigate what the poor can do themselves to improve their condition through education and retraining programs. The subcommittee should spend this time in class developing statements of alternative hypotheses within their topic area; e.g., the poor can best help themselves by learning marketable skills.

3. b. The second subcommittee may investigate what volunteer groups (including church-based and business-based organizations) can do through charity or improved employment opportunities. The subcommittee should spend this time in class developing statements of alternative hypotheses within their topic area; e.g. volunteer groups representing churches in the community can best help the poor out of poverty by organizing efforts to provide free meals, transportation, and other charitable services to the poor.

c. The third subcommittee may investigate existing government anti-poverty programs on the local, state, and national levels, and may research new proposals--including relevant civil rights legislation--aimed at improving the effectiveness of the government's anti-poverty policies. The subcommittee should spend this time in class developing statements of alternative hypotheses within their topic area.

4. Reassemble the class and have each subcommittee report on the hypotheses (solution statements) which appear to be the most feasible and testable alternatives to solving the problem of poverty.

Have a subcommittee reporter write these statements on the board as they are being presented and discussed. Have the class offer suggestions to each group regarding how they go about testing the hypotheses (source of data).

As a sequel to this lesson, students may use some class time in the media center (resource center) gathering data, out in the community interviewing people relative to their topic area, in class writing letters to request information, etc. After the data gathering phase, evaluate the hypothetical solutions in light of the data. The subcommittees can then share with the class the alternative solutions that appear to be the most effective, stressing comparative consequences of the hypothetical alternatives. The entire project may involve a week or two of class time.

SAMPLE LESSON: Using a research assignment to develop skill in gathering data.

OBJECTIVE: Using the Wisconsin Blue Book, the student should be able to identify his/her Wisconsin state senator, the political affiliation and committee assignments of the senator, and describe the senate district in which the senator lives.

1. Explain to students the purpose and uses of the Wisconsin Blue Book and where it may be obtained.
2. Review the Table of Contents, showing the kinds of information to be found in the Wisconsin Blue Book.
3. Make clear the specific information required for this assignment:

a. Identify the Wisconsin state senator that represents your district in the Wisconsin State Senate.

a. Identify the Wisconsin state senator that represents your district in the Wisconsin State Senate.

b. Note your state senator's political party affiliation, and list his or her committee assignments.

c. What areas and communities are located in your senatorial district? Is the district primarily urban or rural? What important industries exist in your district?

d. Describe the educational and vocational experience of your senator.

e. How much political experience does your senator have? Did he or she win office easily or was the last election closely contested?

4. Direct students to prepare a one-page statement that provides the required information.

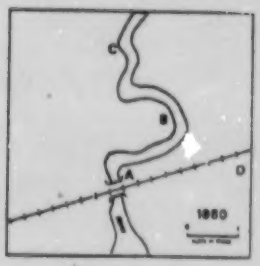
SAMPLE LESSON: Using a Research Assignment To Develop Skill In Gathering Data.

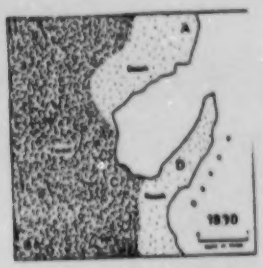
OBJECTIVE: Using the Readers' Guide To Periodical Literature, the student should prepare an annotated list of at least five (5) different articles from current periodicals that deal with the topic of solar energy for home water heating.

1. Instruct students on the purposes and uses of the Readers' Guide To Periodical Literature.
2. Using transparencies made from specific pages of the the Readers' Guide, demonstrate how it may be used to find articles on a given topic.
3. Make clear the specific information required for this assignment:
   a. Examine recent issues of the Readers' Guide for articles in periodicals dealing with the topic of solar energy.
   b. Copy down the necessary information (periodical, date of publication, title of article, page references) to locate each of the references to be examined.
   c. Obtain the appropriate periodicals and examine each article dealing with solar energy.
   d. Prepare a brief annotation (a short explanatory note or comment for each article) telling how useful the article would be to a reader wanting to know about solar water heating systems for the home.
4. When the lists have been completed, compare the validity and reliability of sources. Why are some sources more trustworthy than others? How can bias be detected? What are unsupported assertions, and why should they be questioned?

SAMPLE LESSON: Use a map exercise to develop the skill of developing hypotheses.

OBJECTIVE: Given three maps, the students should be able to decide upon tentative and alternative locations for a settlement site in each and orally explain the reasons for the choices.





1. Teacher distributes three maps of hypothetical sites and directs students to place a settlement on each map keeping in mind the year indicated for each drawing.
   a. Teacher asks, "What factors must you consider before you can locate your settlement?"
   b. Teacher asks, "What information do you need which you do not have?"
2. Students locate hypothetical settlements on maps.
3. Teacher puts students into small groups and directs them to share their "hunches" about a "best" settlement location with their peers, explaining the reasons for their choices including observable data.
4. Reassemble students and have some one from each group report the hypothetical settlement locations to the class which seemed "best."

SAMPLE LESSON: Using a research paper to develop skills in research methods.

OBJECTIVES: (Note: Research skills involve a number of related and specific skills that are an integral part of any research work.) Given the assignment to prepare a research paper on a current economic problem, the student should be able to:

(1) select a research problem that is --
   (a) of genuine interest to the student
   (b) limited in scope
   (c) worded precisely as a question to which the research should provide an answer;
(2) locate and collect information from at least five (5) different sources in current books and periodicals;
(3) take research notes on cards, one idea per card, with source and page appropriately indicated;
(4) prepare a tentative outline of the major points to be included in the paper;
(5) prepare a rough draft, putting footnotes where needed, and adding charts, graphs, and tables on separate pages;
(6) rewrite final draft, putting footnotes where needed, and adding charts, graphs, and tables on separate pages;
(7) draw conclusions based on evidence presented in the research paper, avoiding unsupported assertions;
(8) provide an annotated bibliography or list of references used in preparing the paper.

Research skills are useful and important tools for learning. Students who develop research skills learn how to define a problem, how to develop tentative

hypotheses, how to gather and analyze data, how to organize their information and report on their findings. They learn how to draw justifiable conclusions, sort fact from fiction, distinguish fact from opinion, detect ambiguities and contradictions, recognize bias, and to know when important information is missing or being withheld. Research skills can be permanently useful to the student who masters them.

An assignment sheet to distribute to students in assigning a research paper follows. The "Guide for Research Analysis and Evaluation" can be used as an aid in evaluating research papers.

SOME SUGGESTIONS FOR YOUR RESEARCH PAPER

1. The Subject: your research topic should meet the following criteria:

   Choose a Subject
   --of genuine interest to you personally
   --that you can develop through the examination of articles in current periodicals and books
   --limited in scope, clearly defined, as specific as possible
   --worded as a question or problem to which your research attempts can provide an answer

2. Please select your subject by: _____.

3. Research: Begin by using the Readers' Guide to Periodical Literature. Locate and collect information from a variety of up-to-date, reliable sources. Don't lean too heavily on any single source. Consult books to the extent they will be helpful.

4. Taking Notes: Be systematic in collecting information. Use cards of uniform size (3x5, 4x6, 5x9) and on each card clearly indicate the source by author, title, date of publication, and page number. Use one card for each topic or subtopic. Follow the rule - one idea per card. Use a key word in the margin to help you arrange your cards later to fit your outline or plan of writing.

5. Outline: Organize your research topic according to the major ideas you plan to include. Develop a clear and logical outline. A major point outline for your research paper is due on or before _____.

6. Writing the Paper: Write a rough draft following your outline and your notes. Make necessary corrections in grammar, spelling, style, and content. Make your paper as interesting and informative as you can. Use charts, graphs, diagrams if they will help clarify ideas you are presenting.

7. Footnotes: Be sure to footnote sources of information. Footnotes should be used to indicate your authority for every fact or opinion not your own, unless the fact is so well known that everyone might be expected to know it.

   Footnotes should appear on the page where they are needed to identify a fact, opinion, statistic, or quotation, and they should be numbered consecutively throughout the paper.

8. Final Draft: Rewrite the paper in a final draft, putting footnotes where needed, and adding charts, graphs, and tables on separate pages. Your paper may be typewritten (double spaced) or written in ink, one side of a page. Your research paper is due in final form, complete with footnotes and annotated bibliography, on or before _____.

9. Conclusions: Be sure to draw conclusions and justify them. Avoid unsupported assertions. Your conclusions should be supported by the facts and opinions you present in your paper.

10. Annotated Bibliography: Include an annotated bibliography or list of references, explaining in a sentence or two how each source has been particularly useful to you.

A GUIDE FOR RESEARCH ANALYSIS AND EVALUATION

Author of the research: _____ Date _____

Title of the paper: _____

Evaluation and ratings by: _____

5 = Excellent 4 = good 3 = average 2 = fair 1 = poor

1.	Is the research problem limited in scope; worded precisely as a question?	5	4	3	2	1
2.	Did the author use a variety of current, reliable sources? (annotated bibliography)	5	4	3	2	1
3.	Are sources adequately footnoted? Can facts and opinions be easily checked? Does the author give credit where credit is due?	4	4	3	2	1
4.	Is the research well-organized? Does it follow a clear and logical outline?	5	4	3	2	1
5.	Is there evidence the author has made a serious effort to be thorough? Any important areas omitted, neglected, left out?	5	4	3	2	1
6.	Are ideas expressed clearly? Is the meaning at all times clear? Does it read well?	5	4	3	2	1
7.	What about neatness, legibility, spelling, grammar, corrections?	5	4	3	2	1
8.	Are the conclusions of this research justified? Are the conclusions based on evidence presented in the paper? Are unsupported assertions avoided?	5	4	3	2	1
9.	Have alternative conclusions been considered? Are the reasons for rejecting alternative conclusions clear and justified?	5	4	3	2	1
10.	Does the research seem valid, based on truth or fact and supported by correct reasoning?	5	4	3	2	1

TOTAL SCORE [ ] GRADE [ ]

Comments:

CRITERIA OF RELIABILITY IN INTERPRETING DATA

1. Authorship: Who said it?
   Who makes the charge or reports the facts?

   a. Is he or she an authority on the subject involved?
   b. What is the author's known bias?
   c. Is the situation emotionally charged?

2. Sponsorship. Who publishes, distributes or sponsors it?

3. Vested Interest. Whose ax is showing?

4. Factual Content. How specific is the author?

5. Verifiability. Can it be checked?

6. Relevancy. Do the data support the conclusions?

7. Style. Is the style descriptive or propagandistic?

   a. Are the familiar propaganda devices used?

      1. name-calling--giving an idea or person a bad name, so it will be rejected without examining the evidence -- "socialized medicine," "slave labor act," "communistic idea."
      2. glittering generality--associating an idea with noble sounding words with no exact meaning -- "The American Way."
      3. testimonial--linking a loved or hated person with an idea--"Washington would be shocked...," "Russia will be happy..."
      4. plain folks--making one's ideas look like those "of the people" -- "Plain Yankee horse sense..., "The simple faith of my mother tells me that..."
      5. card-stacking--using only those selected facts, true or false, which support one's case. Supporting facts are emphasized, and damaging facts ignored.
      6. Band wagon--"Everybody's doing it," "Every thinking person realizes that..."

   b. Is the style informative?
   c. Are the meanings of the words explained?

8. Consistency. Does it agree with other known facts?

9. Plausibility. Does the story sound reasonable?

SAMPLE LESSON: Using case studies to help to develop problem-solving skills.

(Note: Case study analysis involves a wide range of problem-solving and decision-making skills. Any or all may be used in the preparation of a written analysis of a specific case study.)

OBJECTIVES: Given an assignment to prepare a written analysis of a specific case study, the student should be able to:

(1) define the basic problem in the case, wording it clearly, precisely, briefly, and in question form;

(2) list the major issues, both explicit and implicit; word each clearly, in the form of yes-no questions; (Note: issues are points of controversy, subordinate to but linked with the basic problem in the case.)

(3) prepare a written analysis of one important issue, explaining what reasons seemed to justify a yes or a no response to the specific issue;

(4) make clear what specific values influenced thinking and shaped opinions on this issue;

(5) explain what action, if any, would be advisable to deal with the basic problem in the case.

A fuller treatment of case studies and how to use them in social studies classes is available in Appendix I, p. ___. Here is a score card to use in the evaluation of case studies.

CASE STUDY SCORE CARD Date_____

Name_____

Case Title_____

4 = excellent 3 = good 2 = fair 1 = poor

1. Definition of the problem (clear - unclear)	4	3	2	1
2. List of major issues (comprehensive-incomplete)	4	3	2	1
3. Issue analysis (clear - confusing)	4	3	2	1
4. Quality of reasoning (thoughtful-superficial)	4	3	2	1
5. Justification for conclusions (strong - weak)	4	3	2	1

SCORE ☐

Comments:

Some Points About Using Case Studies And Dilemmas

1. Focus on the skills involved in case studies and dilemmas.

2. With younger students, to open discussions that help them state problems and issues and discuss these may be all that can be accomplished.

3. Older students may focus on other skills such as stating alternatives and consequences, stating reasons with evidence, etc.

4. Pose case studies and dilemmas that do not have a clear cut right answer. Allow for disagreement. Try to remain objective, but also try to focus on analogies that might challenge the student's position. Do this with as many different positions as you can.

5. Allow for many different students to participate with different points of view. Help students to begin discussing the issues by reinforcing their statements. Use strategies such as allowing a person to speak only once, until many other people have had a chance. Try to keep the students' statements brief (as well as your own). Try to get students to talk to each other by remaining silent, by putting students in a circle, by using small groups.

6. Work at using dilemmas. Don't give up if they don't succeed at first. Dilemmas can only build skills if they are introduced on a regular basis.

7. Vary your strategies with case studies and dilemmas. Use role playing, writing position papers and any others in addition to discussion, decision trees, etc.

Some Citizenship Skills Developed Through Case Studies

1. Learning to state positions
2. Learning to state positions and give reasons
3. Learning to justify positions and reasons with evidence
4. Learning to create an argument for a position
5. Learning to clarify and develop alternatives
6. Learning to focus on consequences and effects of alternatives
7. Learning to judge alternatives and consequences through different value perspectives (value clarification)
8. Learning to listen to and respond to others
9. Learning to clarify disputes regarding factual, definitional and value issues
10. Learning to work together to take action

Types of Case Study Dilemmas Examples

Personal

1. Loyalty to peers vs. loyalty to teacher
2. Honesty vs. personal gain
3. Personal privilege for some vs. equality for all
4. Personal self-interest vs. responsibility for one's actions
5. Personal gain vs. obeying the rules
6. Punishment for wrong actions vs. the maintenance of self-esteem
7. Conflicting promises -- which ones to keep?
8. Revenge vs. forgiveness

Public

1. Range and extent of personal and social responsibilities
2. Privacy vs. the extent of state jurisdiction
3. Equality vs. freedom and diversity
4. Security vs. individual rights
5. Private property vs. general welfare
6. Equal access to social, political and economic rewards vs. privileges for individuals and groups
7. Social concern for individuals and groups vs. individual self-interest
8. Change vs. stability
9. Conformity vs. freedom
10. Freedom to pursue the public interest vs. the right to remain private
11. Autonomy of individuals and groups vs. individual and group responsibility for the general
12. The control of conflicts vs. individual and group rights

CASE STUDY NO. 1 -- Pure Air vs. Jobs

San Juan Batista, Calif. -- AP -- This tiny mission town, one of Western America's oldest, will have clean air once again, but the price is the loss of the town's only industry.

Faced with a $2 million bill to meet air pollution standards, the Ideal Cement Co. says it is closing its 52 year old plant January 1. Mayor Roman Hassler, an Ideal employee himself for 28 years, estimates that 800 of the town's 1,031 residents depend on the plant for their living.

Hassler says he is moving to take a job at another Ideal plant. He expects many of Ideal's 160 other workers to move out of San Juan Batista, too. "I've got seven children, and I've got to find a way to make a good living," said Hassler, whose father also worked for Ideal.

About a year ago some residents complained to state air pollution authorities that smoke from Ideal's four stacks soiled the air of their warm secluded valley. The state made tests and found no violation of present air pollution laws, Hassler said, but it warned that the plant was violating the nuisance laws under the State Public Health Code and could be sued.

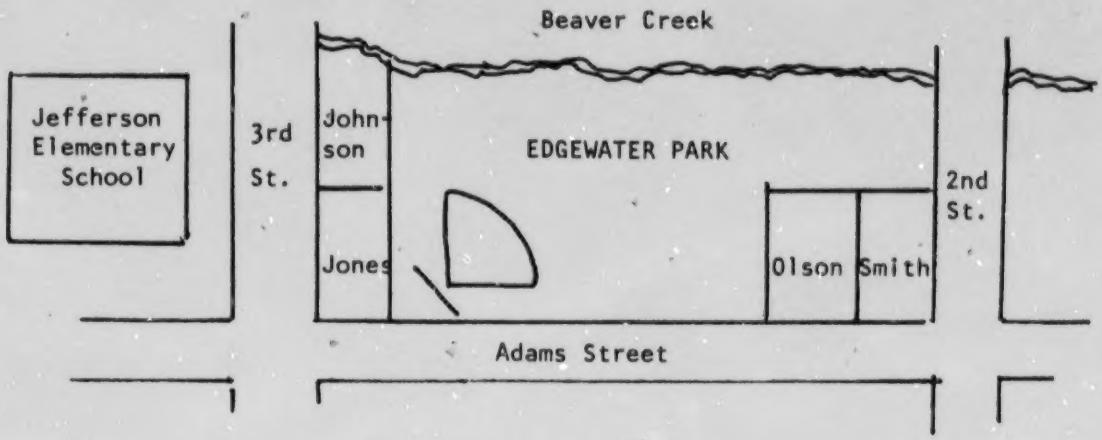
Last month the company announced that the plant would be closed. Officials said the decision was based on the high cost of cleaning up the smoke emissions and the operating inefficiency of the old works. Without the cement plant the town's only source of revenue is tourists who come to visit its 173 year old mission, one of 21 founded by the Franciscan fathers who explored and settled California in the 18th century.

But even the mission is jeopardized by the closing, the mayor said. The annual Fiesta Rodeo de San Juan Batista, which has raised up to $15,000 each year for the past 41 years to maintain the mission is being canceled. Three-quarters of the committee that plans and puts on the fiesta are Ideal workers.

CASE STUDY NO. 2 -- Parks for the Future in Weston

Mr. and Mrs. J. Wesley Olson live in a small home adjoining Edgewater Park in Weston. Their property measures 75 feet wide by 150 feet deep. The house and property together are assessed at a full valuation of $12,000. The City of Weston receives $300 in taxes from the property each year.

Here is a map of the area showing Edgewater Park, Jefferson School and Beaver Creek.



The Weston Park and Recreation Commission has long planned to expand Edgewater Park, when and if adjoining property becomes available to the city. The Olsons are both retired and have only their income from social security. They make an interesting proposal to the Park and Recreation Commission. They offer their property to the city of Weston for park purposes with one stipulation -- they will deed their property to the City of Weston to receive in return the right to go on living in their home, without rent or taxes, for the rest of their lives.

If you were a member of the Weston Park and Recreation Commission, would you accept the Olson's offer?

Justify your answer.

CASE STUDY NO. 3 -- Paying the Costs of Pollution Abatement

The City of Rockville is located on the Rock River. It operates a primary and secondary sewage treatment plant. The plant contributes effluent pollution to the Rock River. Rockville is under orders from the state Department of Natural Resources (DNR) to curb the pollution of the river. It is under orders to improve water quality downstream from the sewage plant by at least 75 percent within a three year period. The DNR has the authority to fine the city as much as $10,000 per day if it fails to comply with the order to "cease and desist" pollution of the river.

The cost of building a new sewage plant adequate to comply with the DNR orders would be at least $15 million. This would involve remodeling the present treatment plant and adding tertiary treatment to the existing facility. Local industry (largely paper mills) contributes to at least 70 percent of the effluent that presently reaches the plant. The present facility is so small that in heavy rain storms the plant regularly by-passes 20-25 percent of the waste water into the Rock River as untreated sewage The river is in such bad condition that it has been listed as one of the "dirty ten" in the nation.

The City of Rockville is within 2% of the limit of bonded indebtedness permitted under state law. Property taxes in Rockville are below the state average, but citizens have the impression that taxes on property are too high and increasing too rapidly.

As a member of the City Council what action would you recommend?

CASE STUDY NO. 4 -- Buses and Trolley Cars

Washington -- General Motors played a dominant tole in destroying more than 100 electric surface rail transit systems in 45 cities -- including Baltimore, Philadelphia, New York, St. Louis and Los Angeles -- between 1932 and 1956, according to a report released today.

"Nowhere was the ruin from GM's motorization program more apparent than in Southern California," said Bradford C. Snell, who testified at the opening of a four-day Senate antitrust subcommittee hearing on restructuring the auto and ground transportation industries. Southern California was served for years -- when it was smog-free -- by Pacific Electric, the world's largest interurban electric railway system. Pacific Electric was a $100 million enterprise with trains that in 1943 carried 110 million passengers through 56 cities and communities. Its last Big Red Cars went out of service in 1961 -- 59 years after the first line began operating.

Snell testified the destruction of the system was accomplished by National City Lines, a holding company formed in 1936 by GM and suppliers of products used by buses, including Standard Oil of California and Firestone tire. They gave National City Liners more than $9 million by 1950 to convert 16 states to GM buses. The bus lines were sold to operators who were required to sign a contract specifying the types of equipment they could buy.

In 1938, GM and Standard Oil of California formed an affiliate of National City Lines that began buying and scrapping electric rail systems in Fresno, San Jose and Stockton. In 1940, it began to acquire and scrap parts of Pacific Electric, finally motorizing the downtown heart of Los Angeles. "The noisy, foul-smelling buses turned earlier patrons of the high-speed rail systems away from public transit and, in effect, sold millions of private automobiles," Snell testified.

"Furthermore, a shortage of motor vehicle fuel and an absence of adequate public transport now threatens to disrupt the entire auto-dependent region." Snell, an assistant counsel to the subcommittee, said his inquiry into "the social consequences of monopoly" demonstrated that "excessive economic concentration can restructure society for corporate ends."

In the case of American ground transportation, Snell testified, GM, Ford and Chrysler reshaped it by eliminating competition among themselves, obtaining control of rival bus and rail industries. The auto giants maximized profits by substituting "large, gas-guzzling cars and trucks" for trains, streetcars, subways and buses, Snell said.

The report, documented with 500 citations, some to GM sources, said that in 1932, the corporation formed a subsidiary, United Cities Motor Transit, with the sole function of buying electric rail transit systems, converting them to GM buses and finally reselling them to operators who would buy new buses only from GM. In 1935, after protests by the American Transit Association, GM abolished the subsidiary, but then formed National City Lines.

-- SOURCE: Los Angles Times, February 25, 1974

Questions

1. How did GM destroy electric rail transit systems?
2. Why did GM seek to destroy electric rail systems?
3. Why did Standard Oil of California and Firestone cooperate in GM's program to destroy electric rail transit systems?
4. How was GM able to accomplish its goals without anyone "blowing the whistle" on what was happening?
5. How was the public harmed by GM's program? What should government have done to protect the public?

CASE NO. 5 -- The Tragedy of the Commons

"The essence of dramatic tragedy is not unhappiness. It resides in the solemnity of the remorseless working of things."

--Alfred N. Whitehead

Professor Garrett Hardin of the University of California caused a mild flutter in 1968 with a paper entitled The Tragedy of the Commons. In it he drew a parallel between the overgrazing of common land in the eighteenth century and the eroding of amenities, such as clean air and water, today.

The tragedy of the commons develops in this way. Picture a pasture open to all. Each herdsman, of course, will try to keep as many cattle as possible on the commons. As a rational being, each herdsman will seek to do that which seems to benefit him most. Sooner or later he will ask: "What is the utility to me of adding one more animal to my herd?" Since the herdsman receives all the benefits from the sale (or consumption) of the additional animal, and since the effects of overgrazing are shared by all the herdsman, this is not a difficult decision for him to make. The rational herdsman concludes that the only sensible course for him to pursue is to add another animal to his herd. And another, and another.... But this is the conclusion reached by each and every rational herdsman sharing a commons. Therein is the tragedy.

Each man is locked into a system that compels him to increase his herd without limit -- in a world of limited resources. Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons. Freedom in a commons brings ruin to all.

In a reverse way, Hardin argued, the tragedy of the commons appears in problems of pollution. Here it is not a question of taking something out of the commons, but of putting something in -- sewage, or chemical, radioactive, and heat wastes into water; noxious and dangerous fumes into the air; and dis-

tracting and unpleasant advertising signs into the line of sight. The calculations of utility are much the same as before. The rational man finds that his share of the cost of the wastes he discharges into the commons is less than the cost of purifying his wastes before releasing them. Since this is true for everyone, we are locked into a system of "fouling our own nest." Thus exploitation tends to proceed until the common property or resource is ruined for everyone, including the exploiter.

Adapted from Science, December 13, 1968

REVIEW OF PROBLEM-SOLVING SKILLS

Robert McCollum
Temple University

Discovering and Formulating Problems

Being sensitive to problems, issues and puzzling phenomena
Deciding exactly what the particular problem is; formulating the problem in workable terms
Reflecting on the problem
Keeping an open mind; not jumping to conclusions
Planning; laying out systematic steps for attacking the problem

Organizing and Making Use of Information

Getting the facts of the problem well in mind
Classifying information; distinguishing between relevant and irrelevant information
Deciding what additional data are needed; inquiring; asking fruitful fact-finding questions
Drawing inferences from the facts; reasoning and analyzing
Reviewing facts

Generating Ideas

Thinking of many ideas for solving a problem, not just a few
Searching for ideas by systematic scanning of problem elements
Searching for ideas by systematic outlining of main solution possibilities
Searching for solution ideas by use of similarities, analogies and metaphors
Thinking of unusual, yet appropriate, ideas
Creating hypotheses that economically account for a set of puzzling facts

Evaluating and Improving Ideas

Checking ideas against the available facts
Devising ways to test hypotheses; experimenting
Choosing the best idea, explanation, or plan from those generated; decision-making
Seeing the implication of ideas; considering consequences
Elaborating ideas; bringing an initial idea to full development
Modifying ideas; changing a good idea to make it even better

Creating New Perspectives

Reformulating problems; looking at situations in new ways
Seeing problems and issues from the viewpoint of others
Transforming unlikely or "impossible" ideas into productive possibilities
Combining ideas into new, surprising, and effective forms; inventing and innovating

ATTITUDES FOR PRODUCTIVE PROBLEM-SOLVING

Readiness to question established ways of thinking; individuality
Willingness to think for oneself
Letting one's mind go in spontaneous fashion
Tolerance of ambiguity; resistance to premature closure
Persistence in fact of failure to solve a problem; perservance
Curiosity about the unknown, unsolved and unexplained
Self-confidence in one's ability to think
Enjoyment in the use of the mind for productive thinking and problem-solving

PROBLEM SOLVING AND CRITICAL THINKING

1. Identification and Definition of the Problem

An individual must become aware of and sensitive to a problem before he or she can be expected to attempt to solve it. One must recognize a problem exists. This should generally be followed by a clear and precise statement of the problem. This first step involves defining the problem, bringing it into sharp focus, and clarification of the difficulties or obstacles to be overcome. "A question well put is half answered," wrote John Dewey.

2. Developing Tentative Hypotheses

This step is characterized by the development of tentative possibilities, the educated hunches, informed guesses and insights into possible alternative solutions to the problem. The validity of tentative hypotheses may be tested by trial and error, experiment and observation, or by systematic examination of possible alternatives.

3. Gathering, Organizing, and Analyzing Relevant Data

The next step is to locate and gather information. This involves identifying what needs to be known, locating the needed data, gathering the needed information, and organizing available facts and opinions. Analysis of the data involves drawing comparisons, noting differences and similarities, examining relationships, and identifying trends, sequences, and regularities. Assumptions, both explicit and implicit, must be identified and examined. Values linked to the problem must be noted to determine their influence (if any) on the data and the interpretation of the data.

4. Drawing Warranted Conclusions

This step involves the development of justifiable conclusions based on the most valid interpretation of the most relevant and verifiable data available. These conclusions should be regarded as tentative and subject to modification and revision in the light of new facts and understandings.

5. Testing Conclusions

The final step in problem solving involves applying the conclusions, testing the conclusions in new situations and against any new information that becomes available. It also involves the possible modification and refinement of conclusions in light of expanded applications and new data.

UNIT EIGHT

DEMOCRATIC PARTICIPATION SKILLS

Definition

Democratic participation is the means by which citizens make known their political desires and interests. It implies various actions that can contribute to effective citizenship. To become effective citizens, students need to learn multiple citizen participation roles. Among these roles are 1) political-observer, 2) political-supporter, 3) political-advocate, and 4) political-organizer.*

Four Roles of a Participating Citizen

(1) OBSERVER: A political observer must have the skills to gather knowledge about what is happening in local, national and international political affairs. It means not only knowing what is going on in political affairs, but being able to interpret the meaning and significance of political events. This is essential for keeping governing bodies accountable and for holding open the door for citizen participation. A good political-observer: (a) knows how to be well-informed on political events and developments, how to find and interpret political facts and opinions, events and developments; (b) can distinguish the politically important from the unimportant; (c) can discount for exaggeration, prejudice, and wishful thinking; (d) can fully and accurately report and interpret political events and developments.

(2) SUPPORTER: A political supporter must have the skills and means to provide resources to implement political policies and decisions. Political leaders can accomplish little without supporters who generally approve their actions and

*Note - This analysis of skills of democratic participation is based on the approach of Judith Gillespie and Stuart Lazarus, "Teaching Political Participation Skills," SOCIAL EDUCATION, October, 1976, pp.373-78.

endorse their decisions. A good political supporter: (a) is reliable; (b) can follow directions well; (c) works with energy and persistence; (d) works well with others; (e) works with care and thoroughness.

(3) ADVOCATE: Citizen-advocates are essential to the successful functioning of the democratic process. The effective citizen-advocate: (a) has developed skills in the art of political discussion and debate; (b) knows the general beliefs and attitudes of the groups concerned about an issue; (c) can state and defend a clear position on an issue; and (d) knows how to influence others (knows their needs, problems and interests, and what it will take to influence them).

(4) ORGANIZER: The political-organizer directs the efforts of citizens toward specific political goals, whether it be working for the election of a particular candidate to public office or to defeat a referendum on a specific public question. The citizen-organizer: (a) plans activities that will help achieve desired political goals; (b) can match citizens and tasks according to individual interests and abilities; (c) clearly identifies goals and priorities; and (d) can clearly establish duties and responsibilities, what needs to be done to gain certain objectives, and maintain good working relationships among individual political supporters and advocates.

The Need for Democratic Participation Skills

Democratic participation is often considered the essence of American democracy. Recently, there has been criticism of some leaders of our national government who have seemed to threaten democracy itself through unlawful or immoral actions. The apparent impotence of the average citizen is equally dangerous for the maintenance of democratic practices and procedures, since democracy is based upon skillful citizen participation.

The necessity of citizen participation in democratic societies has implications for more than the support of American government. As the world becomes

increasingly interdependent, citizen roles in the global society become increasingly important. Students become involved in democratic participation long before they are of voting age. Many citizens take important participation roles in the everyday activities of their community and work settings. Many others are models for participation that, with the advance of media and technology, are transmitted to the global scene. A farmer in Iowa and an industrialist in New York both assume political roles in a global society. Their political actions may have far reaching implications. As their actions are viewed by a larger audience, they may influence events far beyond our borders.

What kinds of activities give citizen participation meaning? Citizens are first of all observers of political affairs who gather knowledge and information about what is happening. The informed political observer can potentially influence political decisions and policies, but until the citizen acts on the basis of available information he has limited influence on political events.

Citizens may exert indirect pressure on decision makers. The role of the media in investigative reporting represents one example of citizen observation in action. The investigative reporter may detect corruption in government, inequities and injustices. Skillful reporting may help to expose public officials who are dishonest, inept, or incompetent. Skillful citizen observers dug out the facts on Watergate. Alert citizen-observers have information that helps to keep public officials honest and accountable. Citizen observers help democracy on any level of government to function more effectively.

Citizens often play important roles in helping implement political decisions. In elections citizens play a supporting role as they help candidates win office. Special interest groups that exert influence on public officials to gain acceptance for specific policies and decisions are made up largely of citizens who support specific political goals.

Citizen support can make the difference between success and failure in the responses governments make to critical problems. Political supporters perform a vital role in the political life of a society as they provide the resources and the encouragement needed to implement political decisions and as they provide assurance that governments will be responsive to the needs, problems and interests of citizens.

Citizen-advocates are a fundamental part of democratic decision-making. Citizens urging the consideration of alternative positions on important issues help to provide the competition necessary to sustain democratic governments. In the push and pull of political controversy, citizen-advocates contribute the creative ideas and compromises that are essential for political action.

Another important citizen role is the political-organizer who gives necessary direction to citizen action. Organizers bring citizens and resources together to work toward common goals and serve mutual interests.

The four roles of a participating citizen (observer, supporter, advocate, and organizer) all involve the learning of specific attitudes and skills. Learning the skills appropriate to these roles should be among the significant goals of social studies education.

SAMPLE LESSON: Using a scorecard to rate candidates for public office.

OBJECTIVE: Given a Political Candidate's Rating Card, the student should be able to make a choice among competing candidates and justify his or her selection in a one-page statement.

1. To help your students learn how to decide systematically for whom to vote, you might ask them to consider competing candidates in terms of these questions:
   (a) Does the candidate support programs, goals, and values with which I agree?
   (b) Is the candidate reliable and trustworthy? Does he/she tend to live up to campaign pledges and other public statements?
   (c) Is the candidate influential? Can he/she get things done, if elected?
   (d) Can your preferred candidate be elected? If the candidate you prefer looks like a certain loser, should you vote for the candidate having the best chance of defeating the candidate you like least?
2. Provide students with copies of a "Political Candidate's Rating Card" (see below). Direct your students to:
   (a) watch competing candidates on television and, if possible, in person;
   (b) read current news stories about the candidates;
   (c) talk about the candidates with others;
   (d) examine the candidates' political records.
3. Suggest possible reference sources (Congressional Quarterly Reports, Facts on File, etc.) from which evidence may be gathered.
4. When students have completed the "Rating Card" for several candidates, they should be directed to use the "Comparative Rating Chart" to compare ratings of the various candidates.

POLITICAL CANDIDATE'S RATING CARD

Name of Candidate_____

Part A -- Candidate's Stand on Programs, Values and Issues

1. Does the candidate tend to agree with your personal views about important areas of public concern such as:

		RATING		
		Yes	No	Don't Know
a.	Energy conservation	____	____	____
b.	Environmental problems	____	____	____
c.	Inflation	____	____	____
d.	Unemployment	____	____	____
e.	Crime and delinquency	____	____	____
f.	Civil rights	____	____	____
g.	Education	____	____	____
h.	Taxation	____	____	____
i.	Aid to poor people	____	____	____
j.	Foreign policy	____	____	____
k.	Government spending for social programs	____	____	____
l.	Other_____	____	____	____

2. In summary, does the candidate tend to be more or less in agreement with your views?

a.	strong agreement	____
b.	moderate agreement	____
c.	slight agreement	____
d.	moderate disagreement	____
e.	strong disagreement	____
f.	uncertain	____

'art B -- Candidate's Personal Qualities

		RATING		
		Yes	No	Don't Know
1.	Is the candidate basically honest?	____	____	____
2.	Does the candidate seem to have positive feelings about the needs of people like you?	____	____	____
3.	Is the candidate well-liked and admired by the general public?	____	____	____
4.	Is the candidate well-liked and admired by social groups to which you belong, or with whom you identify?	____	____	____

5. Is the candidate respected by other political figures? ____ ____ ____
6. Is the candidate inteligent? ____ ____ ____
7. Does the candidate appear to have the resources needed to get things done? ____ ____ ____

Part C -- Overall Rating

Answer these questions about your responses to the Political Candidate Rating card.

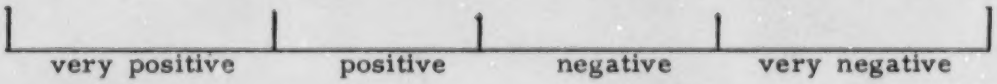
1. Does your rating of the candidate's stand on programs, values, and issues tend to be

a. very positive ____
b. positive ____
c. negative ____
d. very negative ____
e. uncertain ____

2. Does your rating of the candidate's personal qualities tend to be

a. very positive ____
b. positive ____
c. negative ____
d. very negative ____
e. uncertain ____

3. What is your overall rating of the candidate? Make a mark somewhere along this scale. If your response is "uncertain" make no mark on the scale.



COMPARATIVE RATING CHART FOR POLITICAL CANDIDATES

Name of candidate	Personal Qualities					Stand on Programs Values, Issues					General Rating				
	VP	P	N	VN	U	VP	P	N	VN	U	VP	P	N	VN	U
1.															
2.															
3.															

VP = very positive P = positive N = negative VN = very negative U = uncertain

After students have completed the "Comparative Rating Chart," ask them to consider these questions: 1) Which of the qualities of the candidates do you value most? 2) Why do you value these qualities? 3) Based on your responses to the "Rating Card" and your values about qualities of the candidates, which should you support?

(Adapted from John J. Patrick, "Making Decisions About Participating In Elections," SOCIAL EDUCATION, October, 1976, pp. 370-372.)

SAMPLE LESSON: Writing a Position Paper

OBJECTIVE: Students should be able to write a position paper (letter to editor; letter to congressperson, etc.) on an issue of concern.

Have students (in small groups or individually) write positions on present issues as well as issues from historical periods. Students should explore shortcomings of political proposals, possible positive results and other costs and benefits of political/economics ideas.

SUMMARY

In the preceding units we have attempted to provide information and teaching suggestions related to eight skill areas: listening and speaking, reading, writing, observation, map and globe, quantitative, problem solving, and democratic participation. Each skill area has been defined, and in addition to a rationale for the skill, sample lessons have been provided that can be adapted for classroom use. The classroom tested lessons have been representative of both simple and complex learning levels to demonstrate potential for skill development at various stages of social studies learning.

Students do not develop social studies skills spontaneously as a part of growing-up, neither do they learn them casually as an incidental by-product of school attendance. If essential skills are to be learned, they must be deliberately built into learning activities that are required of social studies students. A comprehensive, systematic, planned program for social studies skills development, general in outline and flexible in application, is needed to develop skilled and competent students.

No skill or set of skills is mastered in one experience, or in a few casual attempts. Once introduced and understood at the student's current level of maturity, skills must be used repeatedly and in different situations if they are to become a regular, habitual part of a student's customary behavior.

Social studies skills are not mastered easily or quickly. They cannot be painted on a student, no matter how good the paint or clever the artist. Nor can skills be mastered vicariously; they must be learned first-hand by the student who seeks to gain competence in a specific skill. Various principles of learning apply to skill development. Here are eight principles of skill development to consider:

1. Skills are best learned when the learning activity is clearly focused on skill development. When skills are merely incidental to what is learned, they are likely to be insufficiently practiced, poorly understood, and inadequately learned. Growth in skills cannot be taken for granted; desire to learn is necessary for improvement.

2. Skills are learned best when they are meaningful to the learner. To bring forth a student's best efforts, the learner must believe it important to master a specific skill. If the student considers the skill trivial or unimportant for his purpose, little improvement is likely to occur.

3. Skills are best learned when they are matched to the maturity of the learner. Just as a five-year-old cannot usually master a flowing script with a pen, neither can a high school student be expected to write with the same ease and facility of an experienced journalist.

4. For mastery and retention of a skill, it must be used repeatedly. Mere repetition does not necessarily increase skill. Practicing a skill wrongly interfers with learning it correctly. Practice with insight increases learning markedly over mere repetition without insight.

5. Skills are best learned when they are part of an on-going activity and not in isolation. Skills are developed most effectively when presented as they are needed. The learner should be aware of how useful a skill is both in and out of school.

6. Skills are learned best one at a time, but development of different skills should go on simultaneously. Although attention cannot be on all skills equally at the same time, to ensure balanced intellectual growth and development, opportunities to use and practice a variety of learning skills should be simultaneously available.

7. Skill development and improvement can only be measured by changes in the behavior of the learner. The effectiveness of all learning, including skill development and improvement, is to be found in the nature and manner of a learner's behavior. As a measure of skill development the behavior must be observable, but it is revealed through failure to act as well as through action.

8. Skills are best learned if there is a systematic plan for the sequential development of skills throughout the school program. Most skills begin with simple steps and proceed to more complex patterns of activity. Since all students will not master a particular skill at a given grade level or in a given time, repeated opportunities for development and improvement of skills must be available.

(Adapted from SKILLS IN SOCIAL STUDIES, Helen M. Carpenter, Editor, National Council for the Social Studies, 1963, pp. 12-16.)

To determine the proficiency of students in the various social studies skills, diagnostic activities are needed. A diagnostic approach is essential to provide for individual differences and to be certain that psychologically sound sequences are maintained. The goal for a social studies skills program should be the continual growth and development of all learners.

The necessity for the direct teaching of social studies skills needs to be emphasized. Often we assume that pupils will learn skills simply by doing them. Group-process skills are a case in point, as are such communication skills as listening and reading. Because we understand the organization of our materials and the technical vocabulary and concepts of the social studies, we are the most appropriate persons to teach students how to read the instructional materials. Nothing less will be effective if we hope to help our students learn to be better readers of social studies materials. Perhaps the best ways to teach skills are those that provide for instruction in selected skills within the framework of the subject being studied. Under these circumstances the skill attainment becomes a prerequisite to gaining other objectives in the activity. Skills should not, and cannot, be taught apart from a content framework.

If critical thinking and reasoning are the primary aims of general education then students should be helped to attain these goals in an integrated rather than a compartmentalized fashion. Skill in critical thinking, for example, is most effectively and efficiently learned if teachers in every subject area view their task as a joint effort, and seek to develop students who are proficient at critical thinking regardless of the course being studied. Narrow and artificial subject matter boundaries in too many cases cause teachers to view a certain skill as a social studies skill, another as a language art skill and still another as a math skill. Such myopia produces fragmentation in a skills curriculum and confusion in the mind of the learner. It is not productive to the general usefulness and transferability of such an important skill as critical thinking.

Lastly, it is important that priority be given to skills that promise to be most valuable in the future. Along with persistent and recurring problems will be new, unanticipated ones that will demand a willingness to learn and to be creative problem solvers. A K-12 skills curriculum in the social studies may contribute much toward producing the competencies of survival.

Evaluating a Social Studies Skill Program

To determine the extent to which social studies skills are an important aspect of your social studies program, consider the following questions.

1. What proportions of the performance objectives for social studies courses deal with skills?
2. To what extent do tests and examinations focus on proficiency in social studies skills?
3. Do in-service or staff development programs focus on the teaching of social studies skills?
4. Do curriculum committees address the need for competencies in social studies skills?
5. To what extent is district-wide accountability based on skill development?
6. To what extent are social studies skills taught by all teachers and in all grade levels?
7. Are some social studies skills being neglected because of the "George will do it" attitude?
8. Is there a comprehensive planned and integrated program for the teaching of social studies skills?
9. Does supervision of teaching performance stress sensitivity to social studies skill development?

10. Do social studies curriculum guides reveal a sequential pattern for the development of skills?

11. Do social studies texts, instructional materials, and other resources support effective skill development?

SOME SOURCES OF INFORMATION ON DEVELOPING SOCIAL STUDIES SKILLS

Carpenter, Helen M. (ed.). SKILL DEVELOPMENT IN SOCIAL STUDIES, Washington D.C.: National Council for the Social Studies. 33 yearbook, 1963.

Chapin, June R. and Gross, Richard E., TEACHING SOCIAL STUDIES SKILLS, Boston: Little Brown and Company, 1973.

Ford, LeRoy, USING THE CASE STUDY, Nashville: Broadman Press, 1969.

Galbraith, Ronald E. and Jones, Thomas. MORAL REASONING: A Teaching Handbook for Adapting Kohlberg to the Classroom, Minneapolis: Greenhaven Press, Inc. 1976.

Kurfman, Dana G. (ed.). DEVELOPING DECISION-MAKING SKILLS, Washington D.C.: National Council for the Social Studies, 1977.

Morse, Horace T. (et al) SELECTED ITEMS FOR THE TESTING OF STUDY SKILLS AND CRITICAL THINKING, Washington, D.C.: National Council for the Social Studies, Bulletin No. 15, 1971.

Rath, Louis (et al). TEACHING FOR THINKING: Theory and Application, Columbus: Charles E. Merrill, 1967.

How To Do It Series, National Council for the Social Studies, 3615 Wisconsin Avenue, N.W., Washington, DC, 20036

Rubin, Louis J. (ed.). LIFE SKILLS IN SCHOOL AND SOCIETY, Washington, D.C.: Association for Supervision and Curriculum Development, 1969.

APPENDIX I

Case Studies

A powerful tool to help students learn the skills involved in decision-making is the case study. A case study is a problem situation that may be presented in a variety of ways. 1) It may be a straight news report of an incident, an event, a policy decision, or an unexpected development that creates a problem. 2) It may be an unfinished story that presents a cliff-hanger situation usually ending with "What should John Smith (or Jane Jones) do in this case?" 3) It may be a detailed account of a critical incident that confronts the learner at the explosion point of the problem. It becomes a "now-that-it-has-happened-what-do I-do?" case. 4) The baited case deliberately with holds significant parts of the picture, and learners learn to search further. Sometimes a case deliberately includes insignificant material to help the student learn how to weed out the irrelevant and unimportant. 5) Still another form is the ex post facto case that leads to an evaluation of a decision already made. It becomes not a "what-should-I-do?" case, but a "did-I-act-wisely?"

The best case studies are built around problems of concern to the individual. Such cases deal with problems of significance, problems with which students can identify and even take sides. Problems must be real, dealing with issues that are important to people, issues that are controversial and worth getting concerned about; for example, problems of life and death, love, money, family living, human rights.

The best cases present a variety of possible alternatives. In other words, reasonable and responsible citizens disagree as to what, if anything, ought to be done. A good problem requires consideration of more than one point of view and affects many lives or large areas of life.

The best cases deal with problems that represent a fairly common or typical situation. They involve problems that persist and recur in human experience, as opposed to the transient and sensational. Examples of good problems for case studies involve independence and personal freedom, the results of technological change, and changing attitudes toward work and leisure.

Where to find case studies. Few good cases are found ready-made. Most have to be edited; but a number of good sources provide problem situations that can be developed into good cases.

One excellent source consists of cases that have come before the United States Supreme Court. Sooner or later many controversial issues in American life come to the attention of the Court. If the essential details of a case can be presented without becoming involved in legal technicalities or revealing how the case was decided by the Court, there are often the ingredients for excellent case studies.

Another good source of problem situations consists of labor cases that have gone to arbitration. These cases often deal with important issues that concern substantial groups of citizens not immediately or directly affected by the case itself.

News items in the daily papers often suggest possible cases. For example, a headline such as this invites further attention for possible use as a case study -- "City Council Considers Curfew for Parks." "Letters to the Editor" frequently deal with situations that make good material for case studies.

To be suitable for classroom use, a case study needs to be carefully written and edited. A case writer must learn to report only what has been seen and heard -- no more. He should not include his own interpretation and opinions. The description of the case may be brief, but it should include enough of the facts so that the problem has the atmosphere and detail of reality.

A good case study includes some irrelevant material in order to give students practice in selecting significant facts and ideas. A case that contins no irrelevant facts, opinions, or ideas is unreal because it lacks those messy irrelevancies that are so much a part of real-life problems. Students should learn to distinguish the important from the unimportant.

Sometimes the description of a problem needs to include background information familiar to adults. If we bear in mind the age and experience of the students who are to consider the case, we will know when they may lack the necessary background and what and how much to provide.

The role of the teacher using case studies needs to be carefully defined even though there is no single best way to lead the analysis and group discussion of a case.

The teacher's role in using the case method of instruction is to assign the case for analysis, to act as a responsible member of the group delegated to provoke reflective thinking, and to help students (by his own contributions and questions) to examine points of major importance. In his role as discussion leader, the teacher will occasionally put forth ideas of his own, but he will avoid dominating the discussion. The teacher's ideas and contributions are to be examined, accepted, or rejected as freely as those of anyone else in the group.

A good way to begin the discussion of a case is to consider questions students may have concerning the facts of the case. Students must understand the details clearly before they can begin to decide what to do about a problem. The teacher is not obligated to provide or invent additional facts, for a well-written case ordinarily provides sufficient information. To the student who feels the need for additional information, we may point out that this is often the case in real life. We sometimes have to act on the basis of what seems to be insufficient information.

The interpretation of the facts is an important step in the opening phase of any case discussion. The teacher, along with the more perceptive and able students in the class, may help to interpret the meaning of known facts. Students should realize that facts may often be interpreted in more than one way, that the meaning and interpretation we place on available information may determine what we decide to do about a problem.

After the facts and their meaning have been explored, the second phase of the discussion may focus on the issues in the case. A good case normally includes several controversial issues. Some are obvious, some hidden.

By all means, avoid telling your students what the issues seem to be. Help them to examine the case thoughtfully, but let them figure out the issues for themselves. Do not use questions designed to elicit predetermined responses. It is better to deal with specific issues as they are seen by a particular group of students then to attempt to force the consideration of preconceived issues. No two classes will ordinarily perceive the same issues in precisely the same way for the same case. To expect them to do so is unrealistic and unfair.

If an extremely important issue seem to be overlooked, the teacher may attempt to flush it into the open by skillful questioning. But it is well to remember that students will not acquire new understandings until they are ready to do so. New attitudes cannot be superimposed upon existing ones. When students do not promptly bring up issues you consider important, resist the temptation to berate or lecture. Students learn only at the level where they are, not at the level we would like them to be.

The concluding phases of the case discussion deal with decision-making. The group should decide what, if anything, is to be done; what policy is best and why. There is no need to try to force a consensus or insist that all agree on a best policy or course of action. It is important that alternatives be thoughtfully considered and consequences carefully weighed. It is helpful in this phase

of the discussion to examine the values and assumptions being held by members of the group, for values and assumptions always influence decisions. In the end, each should make up his own mind, realizing that decisions always involve sacrifices and often risks.

To help students examine a problem situation thoughtfully: (1) The teacher should encourage students to make choices freely. There is no room in the case method of instruction for decisions forced or imposed on students. (2) The teacher should help students discover and examine available alternatives. A real choice must exist, not a spurious one. (3) The teacher should help students weigh alternatives thoughtfully, excluding impulsive or highly emotional choices.

The intent of the case method of instruction is to help students learn to make decisions for themselves. It is based on the belief that students can learn to be thoughtful and wise and that sound decisions will come when they learn to use their intelligence freely and responsibly.

Primarily an inductive, non-directive, democratic teaching method, the case method of instruction is based on the assumption that education is more than the imparting of human knowledge and experience. It assumes education should prepare students to meet problems arising in an everchanging environment. The case method helps students learn to deal effectively with new problems and new experiences. By helping students develop skill in relective thinking, the case method teaches them <u>how</u> rather than <u>what</u> to think. Thinking and the new in human experience are inextricably linked. The essential characteristic of reflective thinking is that in the process somehow something new is introduced. Without such things as new facts, new interpretations, new insights, new ideas, new relationships, there is no thinking. If we teach students to deal with the new in experience, we teach them to think. If the fullest potential of the case method of

instruction is realized, the whole method becomes the practical application of the idea that skill in reflective thinking, not simply the acquisition of facts, is the ultimate goal of an educational program.

The case method of instruction assumes that teaching isn't telling, that knowledge cannot be passed on effectively by a simple process of telling. For learning to occur, something dynamic must take place in the learner. We make a serious mistake if we view the teacher's primary responsibility as information giving. To try to tell students what they should know, how they should behave, and what their attitudes should be is a waste of time because it is largely ineffective. We should take seriously the idea that students learn by and for themselves from their own experiences. What we can do most effectively as teachers is to help them in this process.

APPENDIX II

TECHNIQUES FOR STIMULATING REFLECTION-- PROBLEM SENSING*

Introduction

If it is true that stimulating students to think depends in a large measure on the initial step of introducing problems, then the teacher's skill in generating problems is of paramount importance. I do not think that there is any mystery involved in generating problems. Provided that one knows something about his or her students -- what they are likely to believe, their prejudices, aspirations, etc, -- and one also knows the problems that exist in the discipline, then it is fairly simple to stimulate the initial state in reflection -- the problem. Here are some techniques that I have found useful.

The Gross Overstatement. Accurate, reasonable, cautious statements do not usually upset anyone. But the somewhat exaggerated, unbalanced assertion usually seem to hit people right where they live.[1] To say that Americans had an irresistible urge to go West is not likely to provoke a reaction. But to assert that Americans had a profound and unquenchable land hunger which led to the near extinction of Indians, two wars with England, one with Mexico, and a near one with Canada -- this is another matter. Students are likely to be unmoved by a simple, declarative statement that Americans wanted land. But to hear someone say that Americans are greedy...Wanting to go West is one thing, but greed? Hence, the overstatement is a useful technique for stimulating a reaction

* Dr. S. Samuel Shermis, Purdue University, W. Lafayette, Indiana.

[1] Which may be why bull sessions, usually rife with exaggeration, emotionalism overstatements, etc., are so attractive to students -- even though they are fundamentally irresponsible.

Make sure that you know that you are overstating the case and make sure, also that you do not overemploy the technique.

The Double Bind Gambit. Since we recognize that people tend to seal off mutually contradictory beliefs in different compartments of their mind, it is not a difficult matter to confront people with what they usually keep apart. For instance, everyone knows that scientists are careful and cautious people, that they make use of tools and procedures that guarantee truth or Truth, and that these Truths have led to Better Things and more Comfort; therefore, we should respect and appreciate scientists. Also, some of us know that God created the world in six days, just as it says in Genesis I and II. Now, what do we do when we find out that some scientists, using the methods guaranteed to yield Truth, tell us a different story about the origin of this world and of homo sapiens in it? It is not possible to believe that scientists are Truth bearers but that some are also wrong.

Other examples of the double-bind gambit in full flower involve confronting the students with such contradictory beliefs as:

Freedom of speech is for everyone, but rabble-rousers, Reds and pornographers should be squelched.

Violence as a means of problem-solving is a dangerous, ineffective and uneconomical method -- except in Vietnam, and at the 1968 Democratic Presidential Convention in Chicago.

There should be a wall between religion and education, except for (prayer) (Bible-reading) (Federal Aid). Underline one.

Receiving an income from an inheritance is possibly the best means of acquiring money. Receiving money from relief is possibly the worst.

Aid deriving from the Federal government is risky and dangerous because control always accompanies it. Aid deriving from the State government is OK, and anyway, there is nothing wrong with State control.

Beautiful, uncluttered, natural scenery is a gift from God. But let's not do away with billboards.

The Tantalizing Understatement. In the same sense that the gross overexaggeration bugs people, so also does the incomplete and/or understated remark. In

a discussion about the Revolutionary War, I stated that I would assume the position of an English historian. From this point of view, this was was only a series of unfortunate errors committed by His Majesty and Parliament while Great Britain was occupied with other tasks. With a little better luck and something else than third rate generals, Great Britain would have wiped out that nest of smugglers, tax dodgers and deluded patriots in a few months. The idea of hearing our War of Liberation called an unfortunate error triggered some interesting, if visceral, reactions.

Again: It is possible, I once told a class in social studies, that capitalism was one of the factors responsible for our fairly high standard of living. Usually kids believe that capitalism is the reason for all these bounteous things having come our way. They neglect such factors as the character of immigrants, the geographical isolation of our country, natural resources, the Protestant Ethic, and a few others. Therefore, to say that capitalism was, perhaps a factor is to fly in the face of heavy, accumulated tradition.

I Think I Agree, But What Do You Mean? Of course, competition makes people perform at their best, competition lowers prices and creates incentive, etc., etc. Of course, competition is appropriate to the classroom because it is a Way of Life. But, just what, precisely, do you mean by "competition." Oddly enough, most persons cannot define the term meaningfully, or even give clear criteria for it. At least, I have run across very few who can do anything else but identify competition -- and this is not accurately. To ask for an explication of meaning is a particularly effective way of stimulating reflection; for one is asked to be precise about a term which "everyone" understands only to find oneself in a position where, clearly, one does not understand it.

The Wrong Context. A somewhat upsetting experience is to be confronted with a comfortable generalization or theory, taken out of a familiar context and put

where no one in his or her right mind would put it. Do we agree that matters of taste -- i.e., aesthetic preference -- are purely a subjective and personal matter? Yes, of course. If I wish to wear stripes and plaid together, is this OK? Yes, it is. You have no taste, but this is strictly your own business. Can I wear underwear decorated with the stars and stripes? That is different, no, you can't. Why not? What, precisely, is the difference between my aesthetic taste in underwear and my preference in any other clothing?

Somehow, this whole thing is insane, but few can put their finger on what is wrong. In fact, what has happened is that the aesthetic context has been moved to an ethical one. But since it is usually held that aesthetics are one thing and ethics are another, this shift is difficult to see. It is however, a dandy technique for generating confusion.

The Reductio Ad Absurdum. Yes, you are right: we have no business subsidizing illegitimate children. If slum mothers persist in mating so freely, why should good citizens be taxed to support immorality? Right, absolutely right. I would suggest, then, that we take away all Aid to Dependent Children funds and simply let the illegitimate children starve. Well, no, I didn't mean that. Well, what did you mean? I mean simply that we shouldn't subsidize immorality. But, aren't you suggesting that we remove all aid that is used to support these children? Well, yes and no...

The reductio ad absurdum -- carrying an idea to an absurd conclusion -- is a fine technique for creating doubt. No one likes to have his or her ideas carried to a logical conclusion when such is obviously more than one can live with. If you can indicate that a given position, carried far enough, results in a reductio ad absurdum, you have provided the basis for perceived internal conflict.

The Unheard of Theory. Often, all that is needed is a theoretical position which is not known by students. Such an unheard of position tends to force people to

look at the world in a different way, and doing this usually generates conflict. Here is an example: According to the New Testament, the Pharisees of Palestine were "whited sepulchres" who believed so rigidly in the observance of the law that they forget about the spirit. However, there is about this interpretation of the Pharisees an historical interpretation of which most are unaware. How so? Who wrote the Bible? Christians or Jews? Obviously Christians. Is it not true that Matthew, Mark, Luke and John expressed a Christian historical bias? That is, were not their biases against those Jews who did not accept Jesus as the Messiah? Obviously this is true. Unless you wish to believe that one's biases account for the whole truth, then it seems probable that the early Christians did not account for the entire truth. That is, it is possible that the Jews mentioned in the New Testament had a position that is entirely viable but is simply not known to those who have uncritically accepted the New Testament interpretation.

What we have done here is to introduce a different kind of interpretation ...another way of looking at reality. This procedure is scarcely new to historians who are constantly revising interpretations, but it is likely to be startlingly new to students. Hence, one can generalize by saying that a new theoretical position, a very different interpretation of familiar events, is one way of stimulating a problem.

The One Word Reply and No Reply. Often this gambit is used when a student asks a complex question, the answer to which he or she probably already knows and who then expects a complex answer, preferably one that agrees with his or her own bias. Thus: Don't you agree that democracy (capitalism, the Judeo-Christian ethical position, etc., etc.) is immeasurably superior to anything else? Answer: No. Nothing but a simple no, followed by a moment of dead silence so that the confusion and shock can permeate the classroom.

Giving no reply whatsoever is another approach. I am assuming that an important question left unanswered will often generate enough tension to drive one to seek an answer. By not responding, throwing the question back at the student, or saying "I don't know," one is really trying to force a student back on his or her own resources.

The Unexpected Analogy. Question: What causes anti-Semitism? Answer: That question is like asking the victims of a robbery why they were being robbed. Analogies are useful in defining ideas but analogies are "as if" statements, and "as if" is simply not an equation or a substitute. However, the beauty of this gambit is that while one expects a rational answer, the unexpected analogy tends to force the person to re-examine his or her premises. That is, instead of supplying an answer, one now has to ask, was this the right question in the first place?

The Unexpected Parallel. Although similar to the Unexpected Analogy, this one is a bit more elaborate and usually involves a comparison of two events, positions or beliefs that no one should compare. Example: Should we encourage American manufacturers with subsidies, high tariffs, etc.? Student's answer: Of course, this is our policy. Next question, utilizing the unexpected parallel: Why, then, do people object to subsidizing non-manufacturers, e.g., slum dwellers, minorities? Somehow the juxtaposition of the slum dweller and the manufacturer, and the subsumption of both under the same generalization is hard to stomach.

Analysis. What all of these techniques have in common is that they attempt to create intellectual problems. Their common approach involves setting up a perception of a deviation from the unexpected. One is confronted with a situation in which his or her stock of beliefs, facts, etc., simply will not suffice to explain the unexpected statement. One may be forced into seeing contradictory beliefs or forced to admitting that some beliefs are inadequate in some sense.

Do not forget that these techniques are opening wedges. They are not meant to substitute for other aspects of problem-solving -- i.e., logical analysis, data-seeking, data testing, hypothesis framing, etc. They are designed to initiate discussion of a problem -- although, of course, they may be employed at other stages of the reflective process. When and if you use them, know what you are doing.

APPENDIX III

BUILDING A SKILL NETWORK FOR THE SOCIAL STUDIES CURRICULUM*

Since the recent back-to-basics movement in education, there has been a great deal of interest and concern about skill development in general, and social studies educators have been particularly preoccupied with the relationship of their instructional programs to student competencies in basic skill areas.[1] While these efforts are extremely important, there is a serious concern that many teachers and curriculum developers share, and that is the omission of any sense of coordination of skills towards a common objective. To be sure, topics such as "problem solving" and "decision-making" seem to point to a common objective, but little systematic attention is given to the relationship of "decision-making," for example, to other "basic" objectives such as reading and writing; to say nothing of relationships to "complex" objectives such as hypothesis formation and testing. Skills are, for the most part, taught in isolation and often result in program fragmentation and inefficient use of teacher/learner time.[2] Our purpose here is to explore ways to bring skills together and point them toward a common goal, regardless of the "area" under study. For example, the aptitude to use social studies processes such as inferring, predicting, measuring, formulating definitions, formulating questions and hypotheses, testing hypotheses, and formulating models is perhaps the single most important ability common to all areas of learning. Even a cursory examination of curriculum materials in areas such as reading, social studies, mathematics, science or language arts suggests a number of objectives which call upon the learner to "compare and contrast," "determine cause-effect relationships,"

*Special acknowledgement is given to Mr. Phil Ferguson and the Social Studies teachers in the Waukesha Public Schools for their help in the construction and field testing of this Social Studies Skill Network.

"detect or perceive specious logic or reasoning," "infer a reasonable conclusion," "develop a generalization based upon examination of given data." As a matter of fact, we could go on for some time delineating curriculum objectives which are more common to the above processes than to subject matter per se.

Indeed, these processes may not only be non-specific relative to a given subject but in some cases, they are not even specific to language or culture.[3] Further, if we look at course outlines and subject matter curriculum guides and materials, then it also appears that although the quantities and qualities of discourse modes vary in different disciplines, the kinds of skills required to function adequately in all areas are common. Yet in spite of this, specific attention to instruction in a comprehensive and coordinated set of skills is tangential at best to the operations of the social studies curriculum area. It is, in fact, an irony of the strangest sort which has excluded from serious direct instructional intention what is perhaps the most fundamental concern of education...the ability to use skills in a coordinated way so as to develop reasoning abilities.

Reasoning abilities are not merely a function of intellectual development. To be sure, the child learns to classify, to abstract, to perform the mental tasks required of things such as Piaget's binary operations sets through the stage of formal operations. He or she will to some degree grow into "an ability to conceptualize, to generalize, to hypothesize." Of equal importance here, however, is the fact that those reasoning abilities which do develop as a general function of cognitive maturing are not refined without conscious instruction. The subtlety, nuance, and sharpness of reasoning do not just happen. It appears unlikely, for instance, that learners will develop the ability to detect fallacious conclusions in a deductive mode given reasonable premises.[4] Or the ability to discern and use varying senses of "because"[5] is not present in many adults and older students, yet would appear a crucial skill for effective reasoning in either a formal or in-

formal situation. For example, "because" can be used to establish a cause/effect relationship, to show a justification for knowing, or as a tautology. As causal usage we might say that, "John failed the exam because he didn't study." As a justification for knowing we might say that, "Alice is not in school because we saw her downtown." And, as a tautology (defintion) we could assert that, "She is a doctor because she has an MD degree." All uses of "because" become extremely impoetant in coping with human discourse.

Learners in neither concrete operations nor the state of formal reasoning are able to distinguish between necessary and sufficient conditional.[6] Also, a majority of high school twelfth graders do not perceive the restrictions of antecedent-consequent relationships in casual assertions[7] and reasoning in the deductive modes continues to plague learners right through adulthood.[8]

A conscious and formal commitment to the teaching of reasoning is crucial. Yet, this is not attended to in a serious and systematic fashion in either commercially prepared materials or in locally developed curricula. A review of currently available materials reveals nearly a complete lack of attention to the structured development of reasoning. Activities in classification, to be sure, are to be found, but they are scattered throughout many early reading programs and in some science materials. Seriation or ordering skills are addressed in some social studies programs and in selected composition materials. Spatial relationships are introduced in some math programs. And attention is given to inductive and deductive processes in only varying degrees in most subject areas.

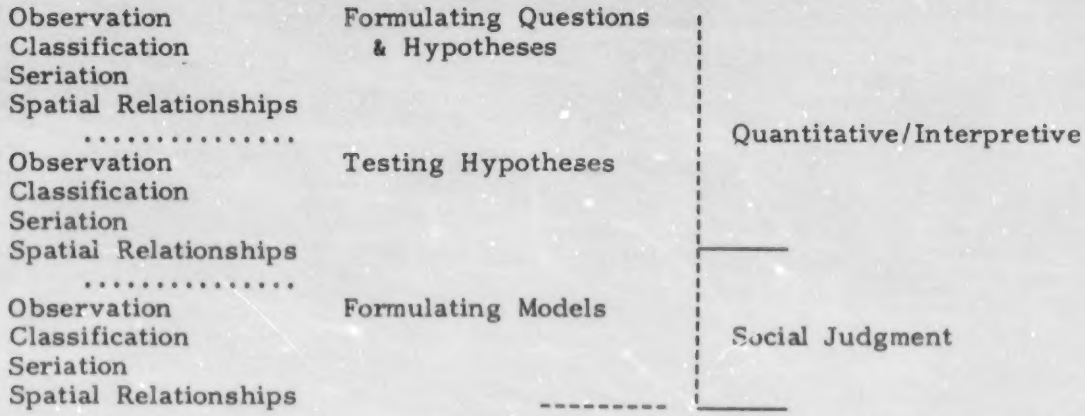
It would seem that if the social studies community could address skills in a direct and coordinated way, it would make a significant contribution to the objective of reasoning. To do this attention must be given to the coordination and practice of "facilitating skills", and "social studies processes" that address all "social studies operations" and, which, in turn, have a direct impact on reasoning.

A Skill Network for the Social Studies Curriculum

The four categories of skills delineated below suggest a taxonomy for the development of competencies in reasoning. The operations of Search, Group Participation, communication (reading, writing, listening and speaking), Quantitative/Interpretive abilities, and Social Judgment depend upon the various social studies processes for substance. In turn, the several social studies processes depend upon the facilitating skills of observation, classification, seriation, and spatial relationships for existence. In reality, when reading skills or map and globe (or any other social studies operation) skills are being developed the student must make use of facilitating skills and social studies processes. For example, in any map or globe activity the student may observe, classify, explain spatial relationships; measure, infer and formulate a hypothesis. Practice with facilitating skills and social studies processes becomes necessary if we expect students to be competent in the basic social studies operations. This kind of skill coordination can point with great force to the objective of reasoning.

Consider the following organization:

Facilitating Skills[9]	Social Studies Processes[10]	Social Studies Operations[11]	Reasoning[12]
Observation Classification Seriation Spatial Relationships	Inferring	Search (Research)	Deductive Inductive Analogical
Observation Classification Seriation Spatial Relationships	Predicting	Group Participation	
Observation Classification Seriation Spatial Relationships	Measuring		
Observation Classification Seriation Spatial Relationships	Formulating Definitions	Communication	



What is important to note in the above is the attention given to the relationship between facilitating skills and social studies processes, and the use of these related sets in the social studies operations. In the teaching of communication (reading, for example), students continually make use of all social studies processes. All competent readers formulate hypotheses as they read and then test these hunches as they read on. A good reader is always trying to anticipate the author, and as he or she reads through the narrative, hypotheses about where the author is going are continually set up and tested. Systematic attention to this process as well as the other social studies processes is fundamental to better reading comprehension.

Similarly, the facilitating skills of observation, classification, seriation, and spatial relationships are instrumental to hypothesis formation as well as to the other social studies processes. Of particular concern, however, are the ways in which these facilitating skills are perceived and presented by teachers. It is extremely important that a clear understanding of these skills be part of all social studies teachers' knowledge. To use an analogy, the facilitating skills, social studies processes, and operations are like the information in the playbook that a professional football quarterback uses. Depending upon the situation and game condition, the quarterback will pick, blend, and sequence plays so as to score. Likewise, the teacher, depending upon the situation, can pick, blend, and se-

quence facilitating skills, social studies processes, and operations areas so as to achieve student competencies in reasoning.

This selection or sequential arrangement suggests a coordination of skills. It means the teaching of reading and map and globe skills, for example, will depend, in turn, upon the teaching of facilitating skills and social studies processes, not as something that would be nice to do, but as something that is necessary to do. In the operation of this network, special attention will have to be given to each skill component so that competencies in handling all of the facilitating skills and social studies processes can be developed. Only when these competencies are address can we hope to develop competencies in more traditional reasoning skills of causality, i.e. deductive, inductive and analogical thinking. This becomes a matter of fact when we consider that practicing skills like classification help us in dealing with disjunctive syllogisms, and the skill of seriation coupled with hypothesis forming and testing becomes the foundation, for example, of dealing with hypothetical syllogisms. The total skill network must be address if student reasoning abilities are to be developed. As an example of the treatment of one facilitating skill, let's consider classification. Classification is used here, as an example, because it is so fundamental to reasoning. The disjunctive syllogism is not only basic to logic, it is basic to all other operations and to concept formation as well.

Thinking About Classifying

"There is a place for everything and everything should be in its place." How many time have we heard these words?

Whether we like it or not everything does have a place...a place in our thoughts and in our language. In fact, everytime we speak, we put objects, events or people "in their places."

"I'm going to take my vacation this year in Canada." In order to make this statement and expect it to have any meaning, many objects, events and people must be put in their places.

What's a "vacation?"

What's a "year?"

What's a "Canada?"

Who am "I?"

The answers to all of these and other questions related to the statement, "I am going to take my vacation this year in Canada," depend on our ability to place certain items in particular categories. It demands an ability to deal with the physical world and our experiences in it so that such experiences are meaningful. For example, "Canada" is a political and geographic abstraction that carries with it a whole array of attributes. It has a location on earth, a particular political system, natural resources and a special demography, all of which helps us to separate Canada from other nations, or to "put it in its place." "Vacation" is a particular abstraction that denotes a separation from work. Vacation may mean less attention to time schedules, more traveling, new cities to explore, etc. Vacation is "put in its place" and we give it a particular meaning. The terms "year" and "I" are also put in their places by abstracting their relationship to other related ideas.

The notions of abstraction, meaning, reality, and the skill of classifying are related in interesting ways. For example, people often speak of the "real world" as something we should prepare for in school. But, what is this "real world?" Is the real world the solid earth or the solid chair on which you are sitting? It must be real for we can touch and measure these items. But we also know enough about science to understand that the "solid" chair is made up of intricate cells composed of more space than matter. And, the earth is a moving fluid mass

which cracks and shrinks and continually reshapes itself. Is the real world that world inside the nucleus of each atom or are the stars in the next galaxy the real world? When you think about it, the real world seems to be more like a great thought than an object or collection of objects. Indeed, the real world (reality) which at first glance seems so obvious can slip from one meaning to a new meaning depending upon the abstraction levels and the classification schemes we bring to bear upon objects, events, phenomena and people. We use language, and more specifically, concepts (categories) to dissect our environments. Whether those environments be physical, social, biotic or spiritual, we use categories or sets to place animals here and fish there, electrons here and nuclei there, Germans here and Russians there, etc...everything is in its place. And if there isn't a place for everything, we will create one.

When, for example, the automobile was invented, new categories and terms were created. Automobile is, of course, the title of a set or category that contains Fords, Chevys, and Volkswagons. And a Ford contains a motor and wheels and a transmission. And, a motor contains pistons and cylinders... and so we go. As inventions or new additions are made to our culture or knowledge, new categories must be created. In fact, it may be the case that invention is a function of our ability to create new classifications by seeing something which no one else has seen before or by asking a question no one has asked before. The physical phenomona available to people like Sir Issac Newton or Albert Einstein were and are available to others. However, these men began to classify items differently. Einstein, for example, saw a relationship between time and speed that suggested a fourth dimension. The categories of time/ speed now speak to a new classification with length, width, heighth (and time) which allows us many new insights into the physical world. Whether we are looking at an Einstein creating a new theory of relativity or a child learning a new term to describe the environment, the skill of classification is fundamental.

Consider what happens when we stumble into a strange environment or come across a strange creature. Where am I? What is it? Is it dangerous here? Will this thing hurt me? But, as soon as we can identify the class or set to which the new item(s) belongs, we assimilate the environment and/or creature by calling up from our memory classes or sets into which these new items can be placed and understood. We do not have the mental ability to treat each new stimulus as a unique entity. Thus, the skill of classification is not only convenient, it is absolutely necessary in dealing with the world.

The ability to classify is basic to all thinking. It is fundamental to proficiency in all other skills such as reading, writing, quantification competencies, etc. The skill of classification is basic to all of these other abilities simply because it is the foundation upon which language use and development is built, and language, in turn in our most fundamental thinking tool.

The skill of classification

The labeling process we go through when learning a new word or a new meaning for an old word is fundamental to concept formation. In essence a concept <u>is</u> a classification...a category. A concept is a categorization of things, events, or ideas. It is a convention; a carrier of meaning; an aid in communication; a tool for thinking; and a helpful guide in bringing order to our world. The concept of "bird" immediately suggests a set or category by which we can separate birds from non-birds. Animals, people, objects, events, phenomena, natural elements must be classified if we are to effectively deal with them. Most useful knowledge has to do with relationships that exist in nature, among people, and between nature and people. Without the acquaintance of a great many classification schemes and the ability to establish criteria for new categories, individuals cannot grasp relational ties between and among basic concepts. And, of course, without this skill there can be no rational thought and no communication.

Classification is an act or thought that sorts objects, events, people and phenomena into groups or sets according to criteria that are consistent, that are agreed upon, that can be communicated and that can be tested according to quantitative and/or philosophical evaluations.

Types of classifications

Classifications can be made in three and only three ways. These three ways are called the disjunctive (either/or) classification; the inclusive classification; and the some/all classification.

1. DISJUNCTIVE (EITHER/OR) CLASSIFICATION

This type of classification means that A and B are separate. An item "belonging" to one set cannot belong to the other.

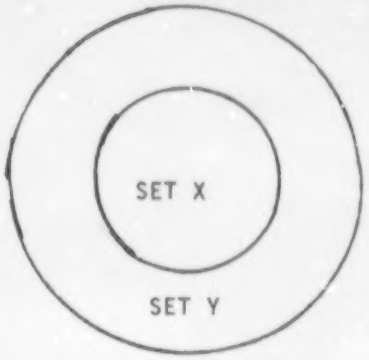
The item is either A or B. The color is red not blue. The tree is tall not short ...etc. Once a category is established...red...tall...etc....items fall within or outside of the set. The letter "A" is not the letter "B"; it is not the letter "C" etc.

We learn the disjunctive classification first. We start using the disjunctive when we begin to distinguish between dad and mom; between dog and cat; and between milk and water. Only later will individuals distinguish between, "my dad and other men," for example. The disjunctive classification skill is also fundamental to vocabulary development, or what we call concept development and labeling. Children can look at many pictures of animals (or draw pictures of animals themselves), and will eventually with instruction come to label the animals

as horse, cow, giraffe, monkey, etc. This process of concept development and labeling (vocabulary development) will allow a child to speak of a giraffe, for example, without presenting a long list of giraffe-like-attributes. And other children, who have developed similar animal categories will know that he or she is addressing the giraffe and not the horse. Skills of disjunctive classification are fundamental to all other skills in the sense that the ability to establish and use discrete categories is prerequisite to all other skill operations.

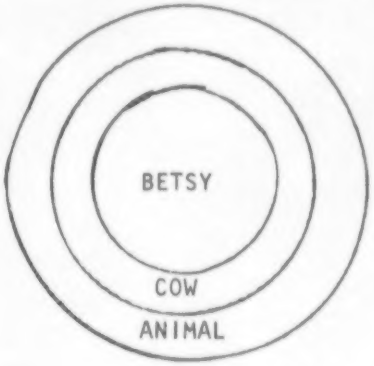
2. THE INCLUSIVE CLASSIFICATION

The inclusive classification means that one set is a subset of another set.

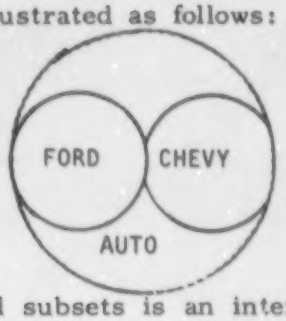


The inclusive classification means that set B is found within set A. All robins are part of the category called birds. All Chevys are part of the set called automobiles.

Inclusive classification can move in two directions. First, inclusive classifications can discriminate within a single set. For example, Betsy belongs to the set called cow; cow belongs to the set called animals. This might be drawn as follows:

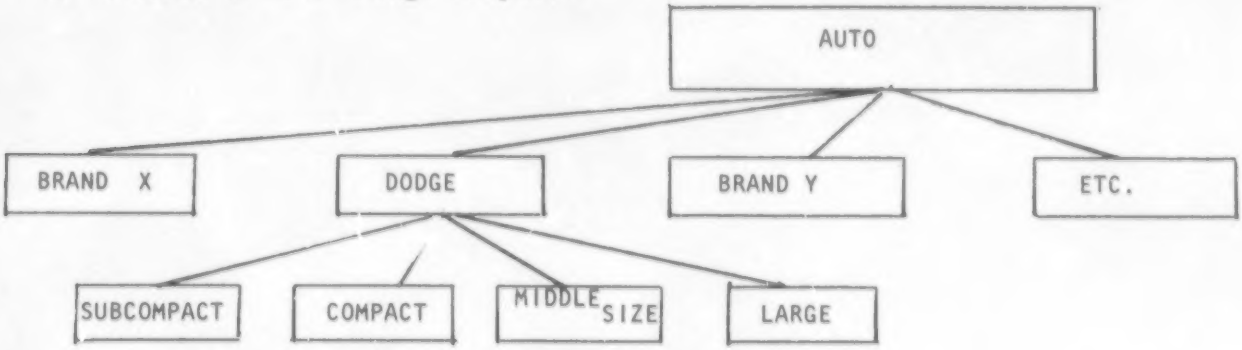


Second, inclusive classifications can discriminate between and among sets within a larger category. For example, Chevys and Fords belong to the set called automobile. This can be illustrated as follows:



The establishing of sets and subsets is an interesting process for students as it allows for linguistic interrelations. Few, if any, objects, events or people have only one name. And because of this multiple name situation they can be placed in more than one category. Further, when we are asked to define something we usually give it another name. We describe a Dodge as an automobile, a robin as a bird, and Mark Twain as a writer. In each case, we place items into a larger category. The point of classification process is to suggest areas of similarities between the item being "defined" and other items within the same larger category. By saying a robin is a bird, we call attention to the fact that a robin has something in common with crows, hawks, and hummingbirds.

We can often specify a smaller subset to which an item also belongs. A hawk, for example can be referred to as, a "red tail" hawk. And a Dodge can be referred to as a "Dodge compact."

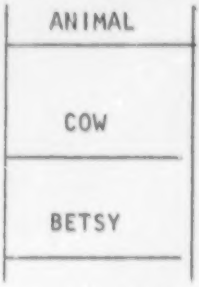


With more names, much more can be said about an item.

Categories can be related in such a way that items may be seen as higher order or lower order depending on what is being compared. Hawk is subordinate (lower order) to bird, but hawk is superordinate (higher order) to "red tail" hawk.

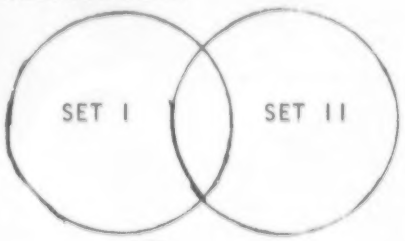
<table>
<tr><td colspan="5">ANIMALS</td></tr>
<tr><td colspan="4">VERTEBRATES</td><td>INVERTEBRATES</td></tr>
<tr><td>MAMMALS</td><td colspan="2">BIRDS</td><td>OTHERS</td><td></td></tr>
<tr><td></td><td colspan="2">HAWKS</td><td></td><td></td></tr>
<tr><td></td><td>RED TAIL</td><td>OTHER HAWKS</td><td></td><td></td></tr>
</table>

The skill can also be seen as the ability needed in dealing with abstractions. Consider:

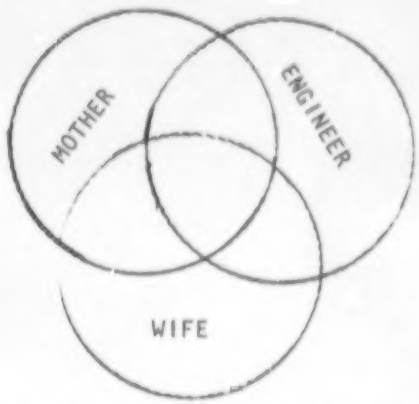


Moving from lower to higher levels of abstraction and back again, is essential to such skills as writing a paragraph or establishing a taxonomy. And, like the disjunctive classification, it is basic to all other skill operations. For example, when a child makes distinctions within particular sets, making explicit the relationship between said set and a sub-set, he or she is taking the first step toward understanding how items abstractly relate to one another. Children begin to see how their dog, Rover, relates to the abstract notion of "dog" as opposed to the category called "cow." This ability is necessary to all thinking.

3. THE SOME/ALL CLASSIFICATION



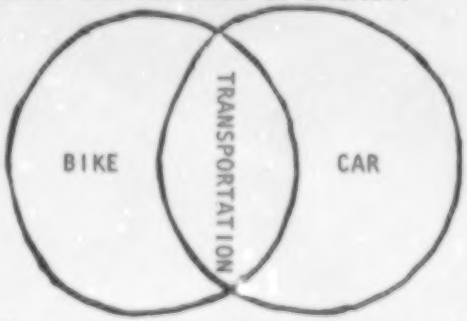
The some/all classification is the most difficult classifying skill to master in that it calls for the ability to discriminate between different sets when these sets overlap. The sets: student/athlete; work/play; son/brother; wife/mother are, examples of concept pairs which share some attributes and yet have other attributes which are unique. The concepts of 'wife' and 'mother' carry some similar, yet many different attributes. The roles of wife and mother suggest similar attributes of being female, a particular age achievement and emotional and physical involvement with other people. However, there are unique attributes to the roles, such as the one dealing more with a legal or social role and the other more with a biological fact. In essence one person can be both a wife and a mother and at times the roles will seem to coincide and at other times the roles will be quite different. The same individual could be a wife, a mother, and a nuclear engineer. Again, there are overlaps of roles that might look like this:



Clearly, the same individual can classify her life as a series of overlapping sets and can gain insights into her total "person."

The pickup truck that is used as the family car and the business truck will have common attributes as well as those attributes that are unique to family cars or to business trucks. The ball that can be used for soccer as well as for volley ball, the insect that can fly or walk, the ship that can float on the sea or under it, the baseball player who also plays basketball...all are examples of some/all classifications.

A useful way to think of some/all classifications is to consider that they can be made in two different ways. First of all, the classification of one item can be made depicting two or more functions, i.e. the automobile which can be used as a car or a truck; a bird and a bear can share the attributes of walking, etc. Second, some/all classifications can be made of different items that perform similar functions. For example, a car and bike share the function of transportation. Or, a tent and a cabin share the function of shelter.



Thus, some/all classifications can be made relative to the same item with different functions, as well as with different items that have similar functions.

As a review, let us consider student activities for each of the three classifications skills. This will be followed with a number of student activities for various grade levels.

The disjunctive classification

I. Give students a group of objects, pictures or stories and then have the students classify according to established categories. For example:

   1. Classify the blocks according to color...red...blue...green.
   2. Classify the pictures according to the following concepts:
      a. metropolitian area
      b. rural area
   3. Classify the narratives as comedy or drama.

II. Ask students to arrange the class so that they are in small groups of from four to six individuals. Give students multiple copies of picture magazines

and ask them to individually tear out five pictures which they like. Then have each group place the pictures (five students times five pictures equals twenty-five pictures) into two or three piles or categories. Then have the students label each pile of pictures. See if any new terms are created by the students.

The inclusive classification

Have students develop a table of contents for a book by using the following phrases:

*What can the individual do about energy use?

*Making the wind work for you.

*Energy in the future.

*The energy crisis.

*Ways of saving energy.

*The sun and alternative energy sources.

The some/all classification

Have students list an object(s) or item(s) that has more than one function. Have students list objects or items that have similar functions.

Conclusion

Social studies educators will need to be familiar with all facilitating skills and social studies processes so that these skills and processes can be used as integral parts of the social studies operations being addressed, and, in turn, these operations when designed and presented in this way, can contribute significantly to the development of the student's ability to reason. In addition, this type of skill coordination should allow for greater efficiency in the teaching/learning process due to the reinforcement that will take place as students work with similar processes and facilitating skills within the several social studies operations of Search, Group Participation, Communication, Quantitative/Interpretive abilities, and Social Judgment.

FOOTNOTES

1. This emphasis upon skill development is seen, for example, in many recent publications dealing with reading in the content area. There are also specific works such as Developing Decision-Making Skills, 47th Yearbook of the National Council of Social Studies, 1977, Dana Kurfman, ed.; and Skills In Citizen Action, F. Newmann, T. Bertocci and R. Landsness, Citizen Participation Project, School of Education, University of Wisconsin-Madison, 1977 which show this concern for skills.

2. In informal comparisons of selected performers' scores on reading comprehension tests, where scores on specific inferential comprehension objectives was low, with performance on non-print cognitive development tasks requiring cognitive skills which many would presume to underly performance on linguistically-oriented counterparts, results suggest that many readers haven't the reasoning ability to perform cognitive tasks to begin with. Reading test then tells us nothing (with any diagnostic precision) about these performers.

3. Moffett, J. and Wegner, B. J. Student-Centered Language Arts and Reading, K-13, Boston: Houghton-Mifflin, 1976.

4. Ennis, R. and Paulus, D. Critical Thinking Readiness in Grades 1-12, Phase I: Deductive Reasoning in Adolescence, Ithaca: Cornell University, 1965.

   Also see Roberge, J. "A Study of Children's Abilities to Reason With Basic Principles of Deductive Reasoning." In American Educational Research Journal, November 1970, 7, 583-596.

5. Klein, M. Inferring From The Conditional: An Exploration of Inferential Judgments By Students at Selected Grade Levels. Unpublished dissertation, University of Wisconsin-Madison, 1973.

6. Shapiro, B. and O'Brien, T. "Logical Thinking in Children Ages 6-13." In Child Development, September 1970, 41, 823-829.

7. Klein, M. Inferring From The Conditional: An Exploration of Inferential Judgments By Students at Selected Grade Levels. Unpublished dissertation, University of Wisconsin-Madison, 1973.

8. Ennis, R. and Paulus, D. Critical Thinking Readiness in Grades 1-12, Phase I: Deductive Reasoning in Adolescence, Ithaca: Cornell University, 1965.

   Also see Roberge, J. "A Study of Children's Abilities to Reason With Basic Principles of Deductive Reasoning." In American Educational Research Journal, November 1970, 7, 583-596.

9. FACILITATING SKILLS - Facilitating skills are those operations that are necessary in performing any social studies processes or mastery of the basic skill areas. Observation, classification, seriation, and spatial relationships are fundamental to inferring or predicting or any other of the social studies processes. But facilitating skills also provide the foundation for basic skill development. That is, reading cannot take place, for example, unless the student can perform the operations of observation, classification, seriation, and spatial relationships.

a) OBSERVATION - Observations can be made in a variety of ways using all of the senses. Where direct sense experience is not adequate for making needed observations, indirect methods are used. Objects and events may be observed with respect to many qualities and quantities. When observations are made in order to accumulate data from which inferences will be drawn, the precision of the observations is critical. Observations are influenced by the experience of the observer.

Social observation can take many forms - from viewing a national political convention on television to watching two children behaving on the playground. Observation can be very directive, as when looking for specific events (factual or procedural); or it can be very nondirective, as when viewing an event and giving an opinion.

b) CLASSIFICATION - Classifying is the grouping of phenomena according to an established scheme. Objects and events may be classified on the basis of observations. Classificational schemes are based on observable similarities and differences in properties which are arbitrarily selected. Classificational keys are used to place items within a scheme as well as to retrieve information from a scheme.

Social classification is manifest in discussing the division of work in the house, or the makeup of a national political party. Classification is useful in that it helps limit or control the data being investigated.

c) SERIATION - Seriation deals with the ability to place items in order. Items, events, or phenomena can be ordered according to time, size, quantity, quality, levels of abstraction, etc.

d) SPATIAL RELATIONSHIPS - Spatial relationships deal with the way in which one item is spatially located relative to another item. Spatial relationships address concepts of location, mass, width and length, as well as size. Concepts which are generally used in describing spatial relationships include north, south, etc. as well as above, below, against, through, etc.

10. SOCIAL STUDIES PROCESSES - The following socials studies processes are necessary to include in the social studies program if the basic skill areas are to be achieved or mastered by students. The seven delineated processes defined below are appropriate for each basic skill area and should be a central part of the student's skill work in any social studies program.

a) INFERRING - Inference is drawing tentative conclusions about what is not directly or immediately observable. While it may be based on observations, inference requires evaluation and judgment. Inferences based upon one set of observations may suggest further observation which in turn requires modification of original inferences. Inference leads to prediction. In the social studies, inferring can take place whenever data are reviewed and an evaluation or judgment is requested. Inferring is necessary in any field of study because of the incompleteness of data.

b) PREDICTING - Predicting is the formulation of a possible consequence based on experience. The reliability of prediction depends upon the accuracy of past observations and upon the nature of the event being predicted. Predictions are based upon inference. Social predicting is becoming more systematic. Predicting may enable man to estimate the consequence of his behavior better and to make more rational decisions.

c) MEASURING - Measuring properties of objects and events can be accomplished either by direct comparison, or by indirect comparison with arbitrary units. However, for purposes of communication, measurement may be standardized. Measuring in the social studies may take many forms, such as population data of the United States or the Gross National Product.

Interpreting data requires the applications of other basic processes, in particular, the processes of inferring and predicting. Through this complex process the usefulness of data in answering the question being investigated is determined. Interpretations are always subject to revision in the light of new or more refined data. Social problem solving is dependent upon the investigator's ability to interpret data. Through interpreting data we move to decision-making (e.g., voting for candidate X or Y; buying more life insurance).

d) FORMULATING DEFINITIONS - Definitions are made in order to simplify communication concerning the event, person, or group being studied. A definition should contain the minimum amount of information needed to differentiate that which is being defined from other similiar phenomena under investigation.

e) FORMULATING QUESTIONS AND HYPOTHESES - Questions are formed on the basis of observations made and usually precede an attempt to evaluate a situation or event. Questions when precisely stated are problems to be solved through application of the other inquiry skills of the social studies. The attempt to answer one question may generate other questions. The formation of hypotheses depends directly upon questions, inference, and prediction. It consists of devising a statement that can be tested by a proof process. When more than one hypothesis is suggested by a set of observations, each must be tested separately. A workable hypothesis is stated in such a way that testing can establish its credibility. The inquirer's framework of concepts and generalizations influences the kind and quality of the questions and hypotheses he develops. In the social studies, if the generalization, "If labor is divided, then work is done more efficiently," is testable, it can be called or labeled a hypothesis.

f) TESTING HYPOTHESES - Testing hypotheses is the process of designing and using data gathering procedures, determining whether the data support the hypothesis. In a less formal sense, the proof process may be conducted simply by making observations. However, even here a plan to relate premises to data is inherent in the process. Among the ways that hypo-

theses are tested in the social studies are: (1) determining whether the hypothesis agrees with data gathered about persons, events, or situations in other times and places; (2) determining whether the hypothesis is consistent with additional data gathered about the event or situation under study; and (3) determining whether the hypothesis agrees with accepted generalizations.

g) FORMULATING MODELS - Models, whether physical or mental, are devised on the basis of acceptable hypotheses, or upon hypotheses that have yet to be tested. Models are used to describe and explain the interrelationships of ideas. In many cases the model implies new hypotheses and if testing these hypotheses gives new information, the model must be altered. Examples of model formation in the social studies are: a map, a drawing of an economy's spending system, and a diagram of the political structure of a country.

II. BASIC SOCIAL STUDIES OPERATIONS - The basic social studies operations become the focus of skill work in the social studies program. They are learned patterns or complexes of the social studies processes. At all levels, students should be developing their ability to use these basic operations.

a) SEARCH - Searching is the purposeful process of asking questions, gathering data and interpretations, judging relevancy and sufficiency, finding answers, and drawing conclusions. In the social studies, search is a constant focus as issues, inquiries, and dilemmas are addressed. Searching becomes more formal as students prepare oral and written presentations.

1. Questioning - factual, interpretive, evaluative

2. Gather, observe, and organize information from a multiplicity of sources

   a. Design investigations
   b. Use the Dewey decimal system, Readers Guide, and other information cataloging systems
   c. Locate and use reference materials productively
   d. Survey, experiment, observe, poll, and interview
   e. Recognize main ideas, note unusual information, check definitions and terms, select most relevant information, and paraphrase
   f. Record sources of information and develop note-taking system
   g. Search for missing information or supportive ideas

3. Evaluate information gathered

   a. Identify and interpret basic premises and theses
   b. Identify and interpret cause and effect relationships
   c. Distinguish fact from opinion
   d. Compare, contrast, and classify to recognize similarities and differences
   e. Recognize and judge bias, emotion, and motivation

f. Cross-reference ideas and information
g. Judge the integrity and sources

4. Presenting information

a. Formulate generalizations, valid inferences and thesis
b. Substantiate ideas using gathered data and logic
c. Use quotations and citation of sources
d. Develop introduction, body, and conclusion to make presentation an original work
e. Strive for good form, good grammar, and academic charm
f. Assume responsibility for final product

a) GROUP PARTICIPATION - Group participation operations are those methods used by people as they interrelate and cooperate in accomplishing a task. The individual contributes to the group and receives from it. Students and citizens have a responsibility to relate effectively as they function in groups, be those groups communities, families, religious institutions, business institutions, school classes, civic/social organizations, or peer groups. The skills of leadership, effective interaction, and participation are fundamental to the social studies program. The classroom and school should be a central location to develop and practice group participation.

1. Take various roles, including leadership, in group work

2. Define the task and design strategies for work

3. Listen to, and be accepting of, people's differences and point of view

4. Take turns, share responsibility, be considerate of others, and show enthusiasm

5. Contribute to discussion in large and small groups

6. Present, communicate, or take action on group decisions

7. Give and accept constructive criticism

8. Reach conclusions and be prepared to vindicate them

c) COMMUNICATION - Communication is the ability to receive and give information, ideas, and values. Individuals and groups transmit messages and preserve knowledge with symbols. Fundamental to any communication is the ability to conceptualize. Then through listening, speaking, gesturing, reading, writing, art forms, etc., people can exchange symbols, values and ideas. Special areas of study have specialized language and while special and technical languages exist, the educated citizen needs to understand the common civic, social and economic language(s) of his or her society and the world.

1. Conceptualize and draw upon vocabulary

2. Read many types of writing with comprehension

3. Read critically

4. Communicate through oral exchange and reports

5. Take notes, outline, and prepare written expressions and reports

6. Listen for a purpose

7. Brainstorm and share ideas

8. Take notes, outline, and communicate through essays

d) QUANTITATIVE/INTERPRETIVE - These operations address the ability to interpret and create models and other symbolic representations of social data. In order to manage the large quantities of data in the modern world the citizen must develop disciplined thinking relative to social knowledge and phenomena, and must know how to organize, interpret and present data in the most effective and efficient ways.

1. Formulate and use models

2. Map and globe skills - symbols, direction, location, interpretation

3. Read, interpret, and construct graphs, charts, drawings; pictures and cartoons

   a. Describing data through the use of frequency tables and measures of central tendency
   b. Using ordered pairs to locate points on a graph
   c. Determining appropriate graphing or presentation techniques for given sets of data
   d. Making predictions from data
   e. Choosing appropriate sample(s) from which to collect data needed to describe a general situation
   f. Using estimation in making comparisons
   g. Measuring
   h. Reading and making charts and graphs
   i. Observing directly and recoding or describing observations
   j. Reading and using ratios and index numbers
   k. Recognize how judgments affecting estimations may be influenced by a individual's perspective
   l. Select effective, efficient mode for presenting data/ information to various audiences

e) SOCIAL JUDGMENT - All decisions which effect other human beings carry with them the rights and obligations of any contract complete with reverences to the high ideals of human rights and

social justice. Social judgment requires the ability to make ethical and rational decisions within all of the various social and physical environments in which we live.

Social judgment includes those skills necessary for making, influencing, and judging the decisions of self and others. It means that the first and most important step toward ethical/ rationale civic behavior is knowledge of and reason for the social contracts within which all people live.

1. Relate past and present; cause and consequence

2. Apply jurisprudential reasoning

3. Make commitments, exercise rights, and exert influence in a responsible manner

4. Apply cost and benefit analysis

5. Recognize bias, emotion, and motivation

6. Arrive at reasoned, ethical decisions and value positions and evaluate their social consequences

7. Preserve human dignity in human relations

8. Accept responsibility and recognize human rights

12. REASONING

a) DEDUCTIVE ARGUMENTS

1. If all of the premises are true, then the conclusion must be true

2. All of the information or factual content in the conclusion was already contained, at least implicitly, in the premises.

b) INDUCTIVE ARGUMENTS

1. If all of the premises are true, then the conclusion might be true, but not necessarily

2. The conclusion contains information not present, even implicitly, in the premises

c) ANALOGICAL ARGUMENTS - Arguments relating to or based upon analogy, i.e. if two or more things agree with one another in some respects they will probably agree in others. The existence of a correspondence between the members of pairs or sets of linguistic forms that serves as a basis for the creation of another form.

A Correlation of Social Studies Operations with the Skill Units discussed in this guide:

SEARCH

.....Observation

GROUP PARTICIPATION

.....Democratic Participation

COMMUNICATION

.....Listening and Speaking
.....Reading
.....Writing

QUANTITATIVE/INTERPRETIVE

.....Quantitative
.....Time and Space

SOCIAL JUDGMENT

.....Problem Solving